NEW ZEALAND

COUNTRY PROFILE

**IMPLEMENTATION OF AGENDA 21:
REVIEW OF PROGRESS MADE SINCE THE
UNITED NATIONS CONFERENCE ON
ENVIRONMENT AND DEVELOPMENT, 1992**

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*United Nations Department for Policy Coordination and Sustainable Development
Division for Sustainable Development*
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NEW ZEALAND

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Note from the Secretariat: An effort has been made to present all country profiles within a common format, with an equal number of pages. However, where Governments have not provided information for the tables appended to Chapters 4 and 17, those tables have been omitted entirely in order to reduce the overall length of the profile and save paper. Consequently, there may be some minor inconsistencies among the formats of the different country profiles.

All statistics are rendered as provided by the respective Governments.

TABLE OF CONTENTS

		Page
ACRONYMS		iii/iv
OVERVIEW		v/vi
FACT SHEET		vii
AGENDA 21 CHAPTERS		
2.	International cooperation to accelerate sustainable development in developing countries and related domestic policies	1-2
3.	Combating poverty	3-4
4.	Changing consumption patterns	5-8
5.	Demographic dynamics and sustainability	9-10
6.	Protecting and promoting human health	11-12
7.	Promoting sustainable human settlement development	13-14
8.	Integrating environment and development in decision-making	15-16
9.	Protection of the atmosphere	17-18
10.	Integrated approach to the planning and management of land resources	19-20
11.	Combating deforestation	21-22
12.	Managing fragile ecosystems: combating desertification and drought	23-24
13.	Managing fragile ecosystems: sustainable mountain development	25-26
14.	Promoting sustainable agriculture and rural development	27-28
15.	Conservation of biological diversity	29-30
16.	Environmentally sound management of biotechnology	31-32
17.	Protection of the oceans, all kinds of seas, including enclosed and semi-enclosed seas, and coastal areas and the protection, rational use and development of their living resources	33-38
18.	Protection of the quality and supply of freshwater resources: application of integrated approaches to the development, management and use of water resources	39-40
19.	Environmentally sound management of toxic chemicals, including prevention of illegal international traffic in toxic and dangerous products	41-42
20.	Environmentally sound management of hazardous wastes, including prevention of illegal international traffic in hazardous wastes	43-44
21.	Environmentally sound management of solid wastes and sewage-related issues	45-46
22.	Safe and environmentally sound management of radioactive wastes	47-48
23-32.	Major groups	49-54
33.	Financial resources and mechanisms	55-56
34.	Transfer of environmentally sound technology, cooperation and capacity-building	57-58
35.	Science for sustainable development	59-60
36.	Promoting education, public awareness and training	61-62
37.	National mechanisms and international cooperation for capacity-building in developing countries	63-64
38.	International institutional arrangements	65
39.	International legal instruments and mechanisms	66
40.	Information for decision-making	67-68

ACRONYMS

APELL	Awareness and Preparedness for Emergencies at Local Level
CBD	Convention on Biological Diversity
CFC	chlorofluorocarbon
CGIAR	Consultative Group on International Agriculture Research
CILSS	Permanent Inter-State Committee on Drought Control in the Sahel
CTE	Committee on Trade and Environment (of the WTO)
EEZ	exclusive economic zone
ECA	Economic Commission for Africa
ECE	Economic Commission for Europe
ECLAC	Economic Commission for Latin America and the Caribbean
ELCI	Environmental Liaison Centre International
EMINWA	environmentally sound management of inland water
EMIT	Group on Environmental Measures and International Trade (of GATT)
ESCAP	Economic and Social Commission for Asia and the Pacific
ESCWA	Economic and Social Commission for Western Asia
FAO	Food and Agriculture Organization of the United Nations
GATT	General Agreement on Tariffs and Trade
GAW	Global Atmosphere Watch (WMO)
GEF	Global Environment Facility
GEMS	Global Environmental Monitoring System (UNEP)
GEMS/WATER	Global Water Quality Monitoring Programme
GESAMP	Joint Group of Experts on the Scientific Aspects of Marine Pollution
GIPME	Global Investigation of Pollution in Marine Environment (UNESCO)
GIS	Geographical Information System
GLOBE	global Legislators Organisation for a Balanced Environment
GOS	Global Observing System (WMO/WWW)
GRID	Global Resource Information Database
GSP	generalized system of preferences
HIV	human immunodeficiency virus
IAEA	International Atomic Energy Agency
IAP-WASAD	International Action Programme on Water and Sustainable Agricultural Development
IARC	International Agency for Research on Cancer
IBSRAM	International Board of Soil Resources and Management
ICCA	International Council of Chemical Associations
ICES	International Council for the Exploration of the Sea
ICPIC	International Cleaner Production Information Clearing House
ICSC	International Civil Service Commission
ICSU	International Council of Scientific Unions
IEEA	Integrated environmental and economic accounting
IFAD	International Fund for Agricultural Development
IGADD	Intergovernmental Authority for Drought and Development
IGBP	International Geosphere-Biosphere Programme (ICSU)
IGBP/START	International Geosphere-Biosphere Programme/Global Change System for Analysis, Research and Training
ILO	International Labour Organisation
IMF	International Monetary Fund
IMO	International Maritime Organization
INFOTERRA	International Environment Information system (UNEP)
IOC	Intergovernmental Oceanographic Commission
IPCC	Intergovernmental Panel on Climate Change
IPCS	International Programme on Chemical Safety
IPM	integrated pest management
IRPTC	International Register of Potentially Toxic Chemicals
ITC	International Tin Council
ITTO	International Tropical Timber Organization
IUCN	The World Conservation Union (formerly the International Union for Conservation of Nature and Natural Resources)
MARPOL	International Convention for the Prevention of Pollution from Ships
OECD	Organisation for Economic Cooperation and Development
PGRFA	plant genetic resources for agriculture
PIC	prior informed consent procedure
SADCC	South African Development Co-ordination Conference
SARD	sustainable agriculture and rural development
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNDRO	Office of the United Nations Disaster Relief Coordinator

ACRONYMS (Cont'd)

UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNU	United Nations University
WCP	World Climate Programme (WMO/UNEP/ICSU/UNESCO)
WFC	World Food Council
WHO	World Health Organization
WMO	World Meteorological Organization
WTO	World Trade Organisation
WWF	World Wide Fund for Nature (also called World Wildlife Fund)
WWW	World Weather Watch (WMO)

NATIONAL ACRONYMS

ACNGT	Advisory Committee on Novel Genetic Techniques
AEE	assessment of environmental effects
ANGOA	Association of Non Government Organisations of Aotearoa
ANZECC	Australian and New Zealand Environment and Conservation Council
BRANZ	Building Research Association of New Zealand
CRI	Crown Research Institute
DOC	Department of Conservation
DPM&C	Department of Prime Minister and Cabinet
ECO	Environment and Conservation Organisations of New Zealand Inc.
EECA	Energy Efficiency and Conservation Authority
ERMA	Environmental Risk Management Authority
FRST	Foundation for Research Science and Technology
GMO	Genetically Modified Organism
HSNO	Hazardous Substances and New Organisms (Act 1996)
IAG	Interim Assessment Group (on GMOs)
ITTG	Imported Tropical Timber Group
LINZ	Land Information New Zealnd
MAF	Ministry of Agriculture
MCM	Ministry of Commerce
MFAT	Ministry of Foreign Affairs and Trade
MFE	Ministry for the Environment
MOE	Ministry of Education
MOF	Ministry of Forestry
MOH	Ministry of Health
MORST	Ministry of Research, Science and Technology
MOT	Ministry of Transport
MRDC	Meat Research Development Council
MSA	Maritime Safety Authority
NSS	National Science Strategy
NZCPS	New Zealand Coastal Policy Statement
NZFIC	New Zealand Forest Industries Council
NZODA	New Zealand Official Development Assistance
PHC	Public Health Commission
PGSF	Public Good Science Fund
RLMP	Rabbit Land Management Program
RMA	Resource Management Act
RS&T	Research Science and Technology
SLM	Sustainable Land Management
TCE	total consumer energy
TPK	Te Puni Kokiri (Ministry of Maori Development)
WAP	Waste Analysis Protocol
WID	Women in Development Policy
YFC	Young Farmers Clubs (New Zealand Federation of)

OVERVIEW

(You may wish to use pages v and vi to briefly present your national position five years after UNCED)

Some key environmental legislation, for example, the Resource Management Act 1991(RMA), predates the Rio Earth Summit, but contains the concept of sustainability. The Resource Management Act has as a single overarching purpose: to promote the sustainable management of natural and physical resources. In essence, sustainable management comprises two things. Firstly it is about recognising more fully the environmental costs of activities and policies in order to protect our natural and physical resources (better environmental valuation). Secondly, it is about better consideration of the earth's resources, with a view to conserving the potential of resources for future generations (better environmental stock taking). The Act's definition provides that human needs are balanced against the intrinsic value of the environment, and elements within it. It provides for the environment to be both used (including with damaging effect) and protected while establishing a baseline for environmental health. Sustainable management seeks to achieve the environmental component of sustainable development, focusing on the sustainability of the natural and physical environment. An important aspect of this is that sustainable management of the environment not be compromised by social or economic goals. Regional government has a significant and key role in implementing the Resource Management Act. In planning for resource management, regional councils must prepare policy statements specifying policies and objectives for the management of resources in the region and the methods by which these will be achieved. Regional councils may also prepare regional plans which further detail the use of specific resources. Territorial authorities must prepare district plans which include controlling the effects of land use, controlling noise, and protecting rivers and lakes. The policies and plans are structured in a hierarchy, and each must "not be inconsistent" with those above it. Central government policies are on top, regional policies below them, regional plans next, and district plans at the lowest level. Central to the development of the plans is consultation with regional government's constituent stakeholders.

Since Rio, several other pieces of legislation have been set in place that give effect to many of the Rio Principles and many aspects of Agenda 21 (as well as to the other Rio agreements viz: the Framework Convention on Climate Change (FCCC), the Convention on Biological Diversity (CBD), and the Forests Principles). Such legislation includes:

- the Forests Amendment Act 1993 which ensures the management of an area of indigenous forest land in a way that maintains the ability of the forest to provide a full range of products and amenities in perpetuity, while retaining the forest's natural values;
- the Biosecurity Act 1993 which restates and reforms laws relating to pests and unwanted organisms;
- the Fisheries Act 1996 which aims to provide for the use, conservation, enhancement, and development of fisheries resources so that people can provide for their social, economic, and cultural well-being while: ensuring the potential of those resources to meet the needs of future generations, and avoiding, remedying or mitigating any adverse effects of fishing on the aquatic environment;
- the Hazardous Substances and New Organisms Act 1996 which has a strong focus on environmental protection and establishes an Environmental Risk Management Authority (ERMA) to, among other things, assess and decide on applications to introduce hazardous substances or new organisms into New Zealand;
- and the Ozone Layer Protection Act 1996 which sets up a framework to facilitate compliance with changes to obligations under the Montreal Protocol.

Along with this legislation, the Government has developed a number of strategies and policies that contribute to the achievement of sustainable development. These include:

- the *Environment 2010 Strategy* (E2010), which is the first comprehensive statement of environmental priorities and strategies ever developed by a New Zealand government and contains goals and an action agenda focusing on eleven priority issues. The *Green Package* announced in the 1996 Budget represents the first attempt to prioritise actions to implement E2010 goals and contained NZ$110 million additional funding over 3 years to address aspects of the 11 priority issues in E2010;
- the *Research Science and Technology 2010 Strategy,* which provides a vision, goals, and action plans to achieve the goals. A key element in the strategy is the Government's commitment to increase public research expenditure from the current 0.6% of GDP to 0.8% by 2010;
- *National Science Strategies* (NSS), mechanism by which the Government develops and facilitates the implementation of national science in key areas of national importance. Currently there are three NSSs in place. These are on climate change, sustainable land management, and possums/ bovine Tb control. National Science Strategies underpin other national strategies that exist in these areas;
- the *Sustainable Land Management Strategy* (SLM) which is designed to promote environmental improvement of commercially-used land for agriculture and forestry, and identifies high country degradation, agricultural impacts on aquatic ecosystems, and hill country erosion as priority areas for action;

- the *New Zealand Coastal Policy Statement* (NZCPS) which provides guidance to regional and district councils on elements in the coastal environment that are of national importance and should be protected, as well as identifying restoration and rehabilitation of the coastal environment as being a national priority);
- a *National Biodiversity Strategy* which will be a plan of action for conserving and sustainably managing biodiversity;
- New Zealand's first *State of the Environment Report* (SER) and the *National Environmental Indicators Programme* - the former representing the first attempt to marshal together scattered statistics and information on key aspects of New Zealand's environment, and the latter the first attempt to develop for New Zealand indicators that will reflect the condition of the environment at a particular point in time, show the pressures that human activities place on the environment, and provide measures of the effectiveness of any action in response to these pressures.

These laws, regulations, strategies, and policies collectively give effect to sustainable development. However, as was recently pointed out in the OECD's Environmental Performance Review of New Zealand, "until there is sufficient information across the range of important issues, it will ... be difficult to prioritise issues adequately. Once quality information and analysis are available, it will be possible to set detailed targets". The collection of central and consistent environmental statistics is one end towards which the SER and indicators programmes is directed, and which will, together with the other measures outlined, contribute to the sustainable management of New Zealand's environment.

UNCSD - NATIONAL LEVEL COORDINATION STRUCTURE OF AGENDA 21 ACTIONS
(Fact Sheet)

NEW ZEALAND

1. Key National Sustainable Development Coordination Mechanism(s)/Council(s).: "UNCED Implementation Officials Group" (an interdepartmental committee).

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2. Membership/Composition/Chairperson

2a. List of ministries and agencies involved: Ministry of Foreign Affairs and Trade; Ministry for the Environment; Department of Conservation; Ministry of Forestry; Ministry of Agriculture; Ministry of Health; Ministry of Commerce; Ministry of Research, Science & Technology; Ministry of Maori Development, Ministry of Transport, Department of Prime Minister and Cabinet.

2b. Names of para-statal bodies and institutions involved, as well as participation of academic and private sectors:
Crown Research Institutes, universities, local authorities

2c. Names of non-governmental organizations:
Informal Consultations held with NGOs

3. Mandate role of above mechanism/council:
To coordinate government's domestic implementation of Agenda 21 and prepare reports to CSD.

4. If available, attach a diagram (organization chart) showing national coordination structure and linkages between ministries:

Submitted by
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NEW ZEALAND

AGENDA 21 CHAPTER 2: INTERNATIONAL COOPERATION TO ACCELERATE SUSTAINABLE DEVELOPMENT IN DEVELOPING COUNTRIES AND RELATED DOMESTIC POLICIES (with special emphasis on TRADE)

NATIONAL PRIORITY:

STATUS REPORT As a country heavily dependent on trade, New Zealand is fully committed to the liberalisation of the multilateral trading system. New Zealand also recognises that strong protection of the global and national environment is necessary to maintain its natural resource base in order to ensure long term economic vitality.

New Zealand strongly supports multilateral efforts to make trade and the environment mutually supportive. New Zealand's position is based upon the principles endorsed by the international community at UNCED and enshrined in relevant trade agreements.

New Zealand participates in the OECD Joint Session of Trade and Environment Experts (JEG) and the World Trade Organisation's Committee on Trade and Environment (WTO: CTE) (preceded by the GATT Group on Environmental Measures and International Trade (EMIT).

At the national level, the Ministry of Foreign Affairs and Trade coordinates consultations with interested business and industry and environmental non-government organisations on trade and environment issues.

For further details on New Zealand's ODA please see chapter 33. New Zealand is a strong supporter of the Barbados Programme of Action for Small Island Developing States.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS					

AGENDA 21 CHAPTER 3: COMBATING POVERTY

NATIONAL PRIORITY:

STATUS REPORT:

- Focus of national strategy

New Zealand is fortunate that absolute poverty as defined in the Programme of Action of the Copenhagen World Summit for Social Development, 1995 is not part of its economic and social environment. Consequently the Government has stated that there has been no need to develop a plan and a target date for the eradication of absolute poverty.

The Government believes that sustained and sustainable economic growth and development is the best way to address poverty in general, stressing the importance of productive employment in developing a dynamic approach to individual and family income, and the efficiency of the "safety net" provided by income support systems. The economic reforms of the past decade have provided a sound framework for economic growth and development. During the past two years a Task Force has recommended, and the government has adopted, policies to improve employment outcomes for New Zealanders, in particular for the young unemployed and for the long-term unemployed.

New Zealand provides a comprehensive set of targeted income support programmes with many supplementary programmes to meet individual and family needs. The government has recently announced a package of tax reductions and family assistance measures which will increase the net income of all low income families with dependent children. This set of policies and strategies is geared to reduce economic hardship for individuals and families in a sustainable way within the context of an overall growth strategy for New Zealand.

Given the substantial amount of policy work already implemented, and the new programme initiatives which are underway, the government has decided that no specific initiatives or other policy measures are necessary.

- Highlight activities aimed at the poor and linkages to the environment

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**
NB: Developed countries, where domestic poverty alleviation is not a major concern may wish to briefly describe their position regarding global poverty alleviation.

STATISTICAL DATA/INDICATORS

	1986	1990	1993/4	Latest 1995	
Unemployment (%)	4.0	7.8	9.1	8.5 forecast	
Population living on poverty line ("basket of food" approach)		6.2 (1992)	9.5		
Public spending on social sector % (does not include health and education)			36.4	35.8	
Other data					

AGENDA 21 CHAPTER 4: CHANGING CONSUMPTION PATTERNS

NATIONAL PRIORITY:

STATUS REPORT:

• National policy objectives/focus

New Zealand's electricity generation is dominated by renewable resources with hydro power producing around 70-75% of annual electricity needs, depending on rainfall. Geothermal power contributes another 7%. This balance is made up by fossil fuel generation.

From 1991 to 1996 Gross Domestic Product (GDP) rose by 16.9% while energy use (i.e. total consumer energy (TCE)) increased by only 11.5% - despite a 9% increase in population. Thus, for a 1% increase in GDP, TCE used increased by only 0.68%.

Establishment of the Government's Energy Efficiency and Conservation Authority (EECA) in October 1992 provides for the introduction of energy efficiency programmes covering all sectors of society. The focus of activities has been the development and implementation of a ten point national Energy Efficiency Strategy since 1994. Energy efficiency measures are also an integral part of the Government's strategy to reduce the production of CO_2.

A "Government Energy Efficiency Leadership Programme" was established in 1993. It encourages improvements in energy efficiency within public sector agencies and institutions (e.g. through loan funding), demonstrating the Government's commitments to effective energy management and lowering emissions of carbon dioxide.

An "Energy-Wise Companies Campaign" was launched in August 1994 and now has membership of over 600 of the largest companies in New Zealand. It promotes commitment to energy efficiency at the top management level of companies, and to establish effective partnership between the Government and the private sector to direct management attention to implementation of cost effective energy efficient practices and technologies. The main features of the campaign are: a public commitment to energy management by company chief executives through endorsement of a common charter of key principles; support from and participation of energy suppliers; endorsement of the campaign by the Ministers of Energy, Commerce and Environment; support from major business, consumer and environmental organisations; practical information, advisory and secretariat support from EECA and annual awards to companies making the most significant improvements in energy efficiency.

In December 1992, a *Waste Analysis Protocol* (WAP) was released. This facilitates the gathering of data on three parts of the New Zealand waste stream - business waste, domestic waste, and waste measurement at disposal facilities. The most appropriate methodologies are used for each part. The WAP provides local authorities with the means to acquire consistent waste stream data on which to base their own resource management and services for waste management. These data will form the basis for developing national waste reduction targets.

The Ministry of the Environment is negotiating waste reduction targets with business sectors whose activities result in significant waste production, and is encouraging voluntary initiatives in waste reduction and resource recovery to achieve the targets. The Ministry for the Environment is also investigating regulatory and economic mechanisms to back up the voluntary initiatives in case they fail to produce adequate internalisation of the cost of waste.

The Government has signed an Accord with the packaged goods industry, and has assisted the oil industry to put in place a national Used Oil Recovery Programme.

The public sector is a significant purchaser of a broad range of goods and services. The sector, therefore, has an opportunity to influence production and consumption patterns. In recognition of this influence and to provide opportunities for local industry, the government has established a purchasing policy for publicly funded purchasers.

• National targets

Cross-Sectoral Issues

1. Decision-Making Structure:

The Ministry for the Environment is the lead agency for waste management policy at the central government level and coordinates waste management policies produced by other Government agencies.

2. Capacity-Building/Technology Issues:

New Zealand's Department of Statistics collects broad statistics on household consumption, but there is no single institution that focuses on the issue of changing consumption patterns. This issue impinges on the mandates and responsibilities of many central government agencies as well as regional authorities and private sector groups.

The Ministry for the Environment promotes waste policy through publications and through working with local government. Waste management is affected by policies developed in both local and regional plans.

3. Major Groups:

4. Finance:

The Energy Efficiency and Conservation Authority (EECA) was, in 1994, allocated an additional NZ$8.45 million over 3 years for specific measures targeted at improving energy efficiency across all sectors of the economy. Future funding for energy efficiency measures will be reviewed towards the latter half of 1997, within the context of evolving climate change policies. EECA also manages the Energy Saver Fund, established in 1994-95, which provides NZ$18 million over 5 years to promote increased uptake of energy efficiency in the residential sector.

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1985	1990	1992	Latest 199_
GDP per capita (current US$)	6,976	12,954	12,003	
Real GDP growth (%)	0.9	-0.4	1.6	
Annual energy consumption per capita (Kg. of oil equivalent per capita)	3,823 [1]	4,087	4,155	
Motor vehicles in use per 1000 inhabitants	553.5	536.5	551.8	
Other data				

[1] 1989.

NEW ZEALAND

Government policies affecting consumption and production.

1. **Goals and Agents (Stakeholders)**

Indicate with a (✓) those agents which your Governments policies are meant most to influence.

Agents / Goals	Producers	Local authorities	Central Government	Households	Civil society
Material efficiency					
Energy efficiency:					
Transport		✓	✓	✓	
Housing	✓	✓		✓	
Other (commissioned)	✓	✓			
Waste:					
Reduce					
Reuse					
Recycle					

Comments:

2. Means & Measures and Agents (Stakeholders)

Indicate with an (R) those agents who assume primary responsibility for any of the policy measures indicated; indicate with an (I) the agents for which the impact is expected to be especially significant.

Means & Measures / Agents	Producers	Local authorities	Central Government	House-holds	Civil Society
Improving understanding and analysis		R	R		
Information and education (e.g., radio/TV/press)			R		
Research			R		
Evaluating environmental claims		R	R		
Form partnerships		R	R		
Applying tools for modifying behaviour	I				
Community based strategies	I	R		I	I
Social incentives/disincentives (e.g., ecolabelling)	I/R			I	I
Regulatory instruments			R		R
Economic incentives/disincentives		R	R		
Voluntary agreements of producer responsibility for aspects of product life cycle	R		R		
Provision of enabling facilities and infrastructure (e.g., transportation alternatives, recycling)		R			
Procurement policy		R	R		
Monitoring, evaluating and reviewing performance		[R]	[R]		
Action campaign					
Other (specify)					

Comments: The responses above do not distinguish between primary responsibility for the development of the policy and its implementation. For example, in some instances central government may be primarily responsible for developing a policy and another agent (or agents) primarily responsible for the implementation of that policy.

AGENDA 21 CHAPTER 5: DEMOGRAPHIC DYNAMICS AND SUSTAINABILITY

NATIONAL PRIORITY:

STATUS REPORT:

The *New Zealand Official Yearbook* - a compendium of facts and figures on New Zealand, published annually by Statistics New Zealand - contains data on, among other things, population, social framework, health and safety, education, employment, science and technology, land and environment, national economy, agriculture, forestry and fishing, energy, housing, transport, and trade.

The New Zealand First Party, a partner in New Zealand's recently formed coalition Government, has proposed the development of a population policy for New Zealand

A variety of public information activities contribute to raising awareness of the linkages among population, environment, and sustainable development issues. These include workshops for local government on Agenda 21 follow up, public meetings held during the development of Government's *Environment 2010 Strategy*, and a variety of local government meetings.

New Zealand Official Development Assistance (NZODA) has taken particular care to ensure that women are involved in decision making at all levels of population and sustainable development strategies, policies, projects, and programs.

Cross-Sectoral Issues

1. Decision-Making Structure:

Several government ministries and departments are concerned with demographic issues. These include: Statistics New Zealand; Department of Social Welfare; Ministry of Housing; Department of Internal Affairs; Ministry of Transport; Ministry of Health; Te Puni Kokiri - Ministry of Maori Development; and Ministry of Women's Affairs. Other agencies such as the Department of Conservation, the Ministry of Education, and the Ministry for the Environment are also indirectly involved in demographic issues.

2. Capacity-Building/Technology Issues:

3. Major Groups: Please refer to activities of local authorities and women under "status" above.

4. Finance:

5. Regional/International Cooperation:

Within NZODA, support for population activities has been channelled mainly through multilateral agencies and international NGOs. The main contribution was NZ$1 million to the work of the UN Population Fund (UNFPA) and NZ$750,000 to the International Planned Parenthood Federation.

In the South Pacific, New Zealand has supported population and development activities on a small scale. In 1995, NZODA provided some support for reproductive health research and for reprinting the publication, *Pacific Islands Populations*, originally produced by the South Pacific Commission for the Cairo Conference on Population and Development. In addition, NZODA provided financial assistance for the South Pacific Alliance for Family Health, a regional NGO.

STATISTICAL DATA/INDICATORS

	1990	1993	Latest 199_	
Population (Thousands) mid-year estimates	3,363	3,451		
Annual rate of increase (1990-1993)		0.9		
Surface area (Km^2)		270,534		
Population density (people/Km^2)		13		
Other data				

AGENDA 21 CHAPTER 6: PROTECTING AND PROMOTING HUMAN HEALTH

NATIONAL PRIORITY:

STATUS REPORT:

The Public Health Commission (PHC - now in the Ministry of Health) published a report on the health status of the New Zealand population in December 1993. The Report noted that despite the "high standard of health" that the country enjoys, "infant mortality has improved only slowly over the last few decades, although more recently, New Zealand saw a dramatic drop in sudden infant death syndrome of 33 percent among Maori and 53 percent among non-Maori between 1989 and 1992." The report demonstrated that New Zealand has high rates of injury and death from road traffic crashes, poisonings and accidents in the home. The incidence of heart disease, melanoma, and cancers of the large bowel and lung is also high. Recent statistics show that New Zealand has one of the highest rates of asthma related deaths in the world. It also has one of the highest levels of youth suicide in the world, particularly among young males (in the 15-24 year age group). The Ministry of Youth Affairs, with support form the Ministry of Health and TPK, is currently developing a National Youth Suicide Prevention Strategy The health status of Maori and other Polynesians, for a variety of reasons, is poorer than that of non-Maori and Polynesians.

Significant changes in road safety policy have been recently implemented to reduce the road death toll. They include the introduction of compulsory breath testing of drivers, the introduction of speed camera-radar systems for enforcement of the speed limit, and compulsory use of helmets by cyclists. Maximum blood alcohol levels have been reviewed, but not changed. A large education programme is currently underway on drink-driving and speeding, and work is being done on penalties for offences. Other changes under consideration include revised speed limits and more stringent vehicle safety standards.

The incidence of HIV/AIDS in New Zealand is comparatively low, 9.8 per 100,000. A total of 413 cases of AIDS were reported by September 1993. New diagnoses reached a peak in 1989 and have levelled off since then. The cumulative incidence of AIDS up to the end of September 1996 was 16.8 per 100,000. Strategies to combat the spread of HIV/AIDS include the promotion of safe sex, education programmes targeted at high risk groups, and a needle and syringe exchange programme for intravenous drug users. These programmes are wholly or partly funded by the Government through the Ministry of Health, and implemented by Government agencies and non-government organisations such as the NZ AIDS Foundation and the New Zealand Family Planning Association.

Cross-Sectoral Issues

1. Decision-Making Structure: The Public Health Commission (PHC), set up in 1993 as part of the reorganization of the health sector in New Zealand, is responsible for improving and protecting public health. The PHC was recently merged with the Ministry of Health.

2. Capacity-Building/Technology Issues:

3. Major Groups: The Ministry of Health, purchasers of health and disability support services (four regional health authorities), and public health service providers, all maintain and encourage consultation with key groups and sectors. Two nationally coordinated programmes for Maori include a sudden infant death syndrome prevention programme and a smokefree programme. Territorial authorities are required to consider their statutory responsibilities under the Health Act 1956 to improve, promote and protect public health in their districts. Functions with public health implications include the provision of sanitary works such as waterworks and the collection and safe disposal of sewage; and in other areas such as liquor licensing; food hygiene; building legislation compliance; dangerous goods; civil defence; and bylaws for public health. Regional council functions that also influence public health include the management of the adverse effects of discharges of contaminants into the environment, and regional transport policies encompassing access, safety, energy, and environmental issues. Some regional public health service providers (i.e. functions relating to public health medicine and regulation, health protection, health promotion and health education, public health nurses etc.) participate in Local Agenda 21 programmes operated by local government. Collaborative working relationships are encouraged to improve, promote and protect public health at the national and local levels, for example between central government agencies, public health service providers, local government and different sectors, such as environment, education and transport.

4. Finance: Community services and high user health cards continue to be the main means in the health sector for ensuring access to health services. For example, for holders of these cards there are no charges for secondary and tertiary medical services. There are also limits in charging for items and consumables, although a range of subsidies are provided for assistance. There are no charges for hospital inpatient services and many day patient and outpatient services.

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994
Life expectancy at birth Male Female	 69.3 75.7	 71.7 77.9	75 (M+F)
Infant mortality (per 1000 live births)	14	11	7
Maternal mortality rate (per 100000 live births)	14	17 [1]	
Access to safe drinking water (% of population)			
Access to sanitation services (% of population)			
Other data			

[1] 1986/88.

AGENDA 21 CHAPTER 7: PROMOTING SUSTAINABLE HUMAN SETTLEMENT DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT: New Zealand is a predominantly urban society with 85 % of the population residing in urban areas and towns. The majority of New Zealanders are physically well-housed, and the adequacy of New Zealand's housing stock is illustrated by statistics which show that in 1991, there were just under 1.2 million permanent dwellings for a population of 3.4 million, or approximately three persons per occupied dwelling. A characteristic of housing stock in New Zealand is the high level of home ownership: 74% of all permanent dwellings were owner occupied in 1991.

Problems of inadequate or insufficient housing are infrequent and isolated, although it is accepted that some groups, particularly those on low incomes, are disadvantaged in finding affordable housing of a suitable standard. Funding to assist the provision of housing for those with special needs is provided through the Community Funding Agency of the Department of Social Welfare.

As of 1 July 1993, previous housing policies, which relied on subsidised loans and rental housing, were replaced by an Accommodation Supplement which aims to improve housing choices for lower income households by creating a transferable subsidy that is expected to enhance the efficient use of existing housing stock.

Recent legislative changes have addressed issues of infrastructure and planning that relate to housing. The Resource Management Act put in place a new planning system, with decision making guided by criteria emphasising impacts on the immediate environment. The Act allows the adoption of a more flexible, integrated and less centralised planning approach. Local authorities are obliged to consult with local communities in preparing their District Plans; these plans play a key role in resource utilisation decisions.

The Building Act 1991, established a single National Building Code, replacing a number of Acts and regulations and a multitude of individual codes create by local authorities. This helps to reduce building and compliance costs and hence the cost of housing. Guidance on ensuring that buildings are safe, durable, accessible and energy efficient is provided by 23 documents released in August 1992, which are to be updated on a rolling 5 year review cycle.

Cross-Sectoral Issues

1. Decision-Making Structure:

2. Capacity-Building/Technology Issues:

3. Major Groups: A number of local authorities in New Zealand have adopted the principles of Agenda 21 in their strategic planning processes, and at least three local authorities (Waitakere, Hamilton and Wellington) have joined the International Council for Local Environmental Initiatives (ICLEI). Hamilton City is one of 21 cities worldwide in ICLEI's Agenda 21 Model Communities Programme. Most local authorities, in preparing the various strategic planning documents required of them under legislation such as the Resource Management Act and Local Government Act, are giving effect to many of the matters set out in Agenda 21. In many ways their annual, strategic, and district plans can be considered "local Agenda 21s". In addition, several local authorities within New Zealand have been active participants in the "Healthy Cities-Healthy Communities" programme of WHO since 1988. There is considerable potential for the Healthy Cities programme, with its intersectoral and collaborative approach, to complement and enhance the development and success of Local Agenda 21s. Some local authorities, for example Hamilton and Christchurch, are actively promoting sustainable transport systems and have programmes to develop cycle ways and to encourage cycling.

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1990	1995	
Urban population in % of total population	84.8	86.1	
Annual rate of growth of urban population (%)	1.0	1.5	
Largest city population (in % of total population)	26.1	26.4	
Other data			

AGENDA 21 CHAPTER 8: INTEGRATING ENVIRONMENT AND DEVELOPMENT IN DECISION-MAKING
(See pages vii and viii at the beginning of the profile)

NATIONAL PRIORITY:

STATUS REPORT: With the passing of the Resource Management Act (RMA) in 1991, and the adoption of Agenda 21 at Rio in 1992, New Zealand is formally committed to promoting the sustainable management of natural and physical resources as a guiding policy principle. The RMA, supported by a variety of other laws and policies, is the basis on which sustainable development can be achieved.

"*Environment 2010 Strategy*", published by the Ministry for the Environment, provides a coherent framework for setting priorities and developing environmental policy. Its preparation involved many policies, programmes, and goals and incorporated input from public submissions and expert opinion. The Strategy establishes a vision for New Zealand's environment to the year 2010 and provides four key conditions needed to underpin achieving this vision: a competitive economy, effective laws and policies, information, and social participation.

Integrated and coordinated approaches to Government decision-making are reflected in policies such as the directive for all government departments to take into account "the collective interest of the Crown" (including specifically its environmental goals) in policy making.

Quality decision making practice obliges Government to consult widely when making decisions affecting the environment and, more particularly, the Principles of the Treaty of Waitangi require that iwi (Maori tribes) are consulted. The Resource Management Act provides for public participation in establishing national policy statements, regional policy statements, and regional and district plans

The Resource Management Act focuses on enabling people and communities to provide for the social, economic, and cultural well being and their health and safety while sustaining the potential of natural and physical resources and avoiding, remedying, or mitigating any adverse effects of their activities on the environment. This is a major change from some of the previous laws which prescribed what activities could go where, for example, agriculture or forestry, residential or commercial development. The Act requires a clear definition of environmental outcomes, including sustainable development limits, but provides freedom of economic and social choice within those limits.

Environmental Impact Assessment is integrated into statutory requirements under the Resource Management Act 1991. Local authorities, when preparing policy statements and plans, must state the anticipated environmental results. Every application for a resource consent must provide an assessment of environmental effects (AEE) as part of the application. The public is able to comment on the adequacy of the AEE through a submission process.

Cross-Sectoral Issues

1. Decision-Making Structure (please also refer to the fact sheet): In May 1993, the Government established an UNCED Implementation Officials Group consisting of the Ministry of Agriculture (MAF), Ministry of Commerce (MCM), Department of Conservation (DOC), Ministry for the Environment (MFE) (convenor), Ministry of Foreign Affairs and Trade (MFAT), Ministry of Forestry (MOF), Ministry of Research Science and Technology (MORST), Ministry of Transport (MOT), Ministry of Maori Development - Te Puni Kokiri (TPK), Department of Prime Minister and Cabinet (DPMC), and the Public Health Commission (PHC) (now the Ministry of Health (MOH)).

Both central and local government in New Zealand have important and complementary responsibilities in implementing sustainable resource management through their planning and management responsibilities under New Zealand's Resource Management Act 1991. The Resource Management Act is one of the three statutes (along with the Companies Act and tax legislation) which have the biggest impact on investment decisions related to natural and physical resources in New Zealand.

2. Capacity-Building/Technology Issues:

3. Major Groups: The Treaty of Waitangi, signed in 1840 between Maori tribes and the British Crown, provides the basis from which Maori interests are expressed and can be realised. Existing mechanisms for resolving claims by Maori include the Waitangi Tribunal. The Minister of Maori Affairs is required to report to Parliament on an annual basis on progress made by the Government on implementation of Waitangi Tribunal recommendations. The current government policy is that all major claims under the Treaty of Waitangi made by Maori will be resolved by the turn of the century.

Processes for public participation are designed to be user-friendly and efficient. For example, when policy that affects Maori interests is being considered, approaches appropriate to Maori are used for consultation. During the preparation of the draft New Zealand Coastal Policy Statement, a series of public meetings and Marae-based hui (meetings) were held throughout the country. These meetings addressed the issues the public and Maori iwi considered important for the integration and sustainable use of coastal and marine resources (except fish). A team selected by Maori iwi also drafted relevant components for inclusion in a policy statement.

Major groups participate in follow-up through their own specific networks, and those that they have with relevant government agencies. Several of the major groups have their own coordination networks.

Major groups participate in the design of national policies through the open consultative process of policy formulation. This includes the use of discussion papers, open to public submissions, in the development of policies (e.g. *Environment 2010 Strategy*). It also includes the opportunity to make submissions to local government on the formulation of their statutory planning documents (e.g. District Plans), and to government during the development of legislation.

New Zealand's preparation for CSD meetings is an open process. Delegations to CSD meetings have been small. Both industry and environmental NGO representatives were included in the New Zealand delegation to the 1995 session of CSD.

There is no government policy on assistance to major groups.

4. Finance:

5. Regional/International Cooperation:

AGENDA 21 CHAPTER 9: PROTECTION OF THE ATMOSPHERE

NATIONAL PRIORITY:

STATUS REPORT:

The Montreal Protocol and its Amendments

- Montreal Protocol (1987) ratified. 21/7/88
- London Amendment (1990) ratified. 1/10/90
- Copenhagen Amendment (1992) ratified. 4/6/93
- The latest report(s) to the Montreal Protocol Secretariat were prepared in 1996.

United Nations Framework Convention on Climate Change

- UNFCCC was ratified on 16/9/93
- The latest report to the UNFCCC Secretariat was submitted in 1996.

Additional comments relevant to this chapter New Zealand is making progress towards the stabilisation of net CO_2 emissions at 1990 levels by the year 2000. This will be mainly achieved by planting new forests and through energy efficiency measures (see chapter 4).

The Resource Management Act focuses on the effects of industrial pollution activities. Activities themselves are not prescribed in the Act, except to the extent that adverse environmental effects must be avoided, remedied, or mitigated according to set receiving environmental conditions. All causes of environmental effects are required to be addressed, regardless of the sector origin.

Studies on lead and benzene in air are ongoing. The New Zealand Refinery no longer refines leaded petrol, but in order to allow existing stocks of leaded petrol to be exhausted, it was sold up until September 1996. There have been studies and reports prepared on odour control from industrial processes such as composting for mushroom culture, fish processing and pulp and paper.

A major study of the possible effects of climate change and ozone depletion included consideration of potential health effects as well, including changes in the distribution of the frequency of tropical diseases, in melanoma and cataracts in *Climatic Change: Impacts on New Zealand - Implications for the Environment, Economy and Society*.

The Land Transport Pricing Study being done by the Ministry of Transport, in bringing together existing material on environmental externalities of land transport (such as those associated with air quality, noise emissions and greenhouse gases), also includes consideration of the health effects of land transport. Government is also developing a light vehicle fleet model based on New Zealand light vehicle fleet composition in 1992. Once completed this model will be used to predict the likely vehicle emissions out to 2025 and used to develop policy options to manage emissions from the light vehicle fleet.. The Ministry for the Environment is developing a set of indicators for air quality.

The Government is developing a computer-based framework for integrated assessment of climate and sectoral impact information to determine the sensitivity of both natural and managed environment to climate variability and change (CLIMPACTS). The Government strongly supports the conservation and enhancement of sinks and reservoirs of greenhouses gases.

Because of New Zealand's geographic isolation in the southwest Pacific Ocean, it is virtually free of any major influence of transboundary air pollution resulting from industrial accidents and natural disasters.

New Zealand achieved the national goal of phasing out consumption of all but essential use applications of ozone depleting substances by 1 January 1996. New Zealand is also targeting the phase-out of HCFCs by 2015.

No phase-out schedule has yet been established for methyl bromide, but consumption has been capped at 1991 levels awaiting the international phase-out schedules which were produced in December 1995. Consultations have begun regarding the implementation of the Vienna Schedule.

Cross-Sectoral Issues

1. Decision-Making Structure: There are several agencies and institutions with responsibilities relevant to the protection of the atmosphere. These include the Ministry for the Environment, the Ministry of Commerce, the Ministry of Transport, the Ministry of Forestry, the Ministry of Agriculture, the Ministry of Research Science and Technology, the Ministry of Foreign Affairs and Trade, the Treasury, and the Energy Efficiency and Conservation Authority (EECA).

Crown Research Institutes such as the National Institute of Water and Atmospheric Research (NIWA) play a significant role in work on protection of the atmosphere. The National Science Strategy Committee for Climate Change comprises representatives from CRIs and policy agencies and also has a role in coordinating New Zealand's climate change science.

Issues associated with the use of safe technologies in industry, transport, and energy fall within the responsibilities of several government agencies including the department of Labour, Occupational Safety and Health, the Ministry of Transport.

2. Capacity-Building/Technology Issues: The Ministry for the Environment produced a set of *Cleaner Production Guidelines* for local authorities to use in setting up and assisting businesses in their areas to implement cleaner production processes. The country has a good capacity to observe transboundary air pollution, to carry out research, and to exchange information in the area.

3. Major Groups: Local authorities with identified air pollution problems (e.g. Canterbury and Auckland Regional Councils) have carried out studies on the effects of air pollution in their regions.

4. Finance: New Zealand received no multilateral or bilateral funding towards the implementation of ozone protection legislation.

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1994-	
CO_2 emissions (Gg)		25,476.00	27,330.00	
So_x (Gg)		no data	no data	
NO_x (Gg)*		106.24	120.03	
CH_4 (Gg)*		1,985.50	1,887.54	
Consumption of ozone depleting substances (Tons)				
Expenditure on air pollution abatement in US$ equivalents (million)				
Other data				

AGENDA 21 CHAPTER 10: INTEGRATED APPROACH TO THE PLANNING AND MANAGEMENT OF LAND RESOURCES

NATIONAL PRIORITY:

STATUS REPORT: A wide variety of sustainable land management issues are currently being addressed in New Zealand. Specific initiatives take place at community and sector group levels as well as within the local and central government.

Regional Councils are working to develop policies and plans to address sustainable land use issues identified through the Regional Policy Statements that they are required to produce under the Resource Management Act 1991. The development of Regional Policy Statements has provided the opportunity to take stock of sustainable land use issues that are currently of concern throughout New Zealand. All regional councils and unitary authorities have raised sustainable land management issues in their policy statements. While priority issues vary to reflect regional concerns, accelerated soil erosion and degradation of elite soils are the two most frequently raised issues.

Several councils have rate-payer funded programmes in place to assist with farm soil conservation and sustainable land management activities. District Councils are also considering how they may best include land use issues in their District Plans. The Waitakere City Council is actively considering urban sustainable land use issues through its Eco-City Project. All councils are considering the best means to implement resource monitoring responsibilities.

The Department of Conservation currently allows over 600 tourism concessionaires to operate in New Zealand's protected areas. A recently adopted Concessions Policy covers all tourism business operating or applying to operate in New Zealand's national parks, reserves and conservation areas. The policy requires all tourism concession applicants to prepare an environmental impact assessment. Tourism concessions will only be granted if they are consistent with the protection of natural resources. A comprehensive public consultation process ensures that concessions are environmentally and socially acceptable and conditions in concession leases and licenses ensure the businesses will be environmentally sustainable.

The New Zealand Government has accorded control of pests (animal pests, weeds, diseases etc.) a high priority through the introduction of the Biosecurity Act in 1993. This Act seeks to decentralise the control of pest species, make pest control agencies accountable for their actions, and to make the funding of pest control transparent. The Act enables regional and central government agencies to develop Pest Management Strategies for the control of any harmful species to levels consistent with regional or national goals.

Although many of the elements and activities necessary to achieve integrated sustainable land management are in place or being worked on, the Government recognises that a more strategic approach would deliver the desired outcomes more quickly and efficiently. Such an approach is envisaged in the proposed New Zealand land management strategy, *Caring for our Land*. The proposal to develop this strategy is a direct response to both the national significance and the complex nature of current sustainable land use issues, and the need for coordination of the wide range of individuals, groups, and agencies that are involved. *Caring for our Land* will develop a common framework within which priorities for action can be identified, responsibilities and accountabilities accepted, and collaborative work programmes developed. The development and implementation of *Caring for our Land* were identified as priority tasks in the Government's *Environment 2010 Strategy*. The statutory framework for this is the Resource Management Act 1991 and the Biosecurity Act 1993. The Government's Sustainable Agriculture Strategy, "Quality Products from a Quality Environment" is an important component.

Cross-Sectoral Issues

1. Decision-Making Structure: The central government agencies primarily responsible for New Zealand's integrated approach to planning and management of land resources are the Ministry of Agriculture (MAF); the Ministry for the Environment (MFE); the Department of Conservation (DOC); Land Information New Zealand (LINZ) (formerly part of the Department of Survey and Land Information (DOSLI); the Ministry of Maori Development - Te Puni Kokiri (TPK); and the Ministry of Research, Science and Technology (MORST). Most of these agencies are members of the UNCED Implementation Officials Group.

2. Capacity-Building/Technology Issues: A number of government-lead initiatives on sustainable land management are currently underway. MORST's Strategic Consultative Group on Sustainable Land Management Research is working to establish priorities for research and science that will contribute to the achievement of sustainable land management. (Key national priorities for sustainable land management research, have been identified in *Science for Sustainable Land Management - Towards a New Agenda*, see Chapter 35). The Public Good Science Fund will continue to make a significant investment in sustainable land management research. Both the East Coast Forestry Initiative and the Sustainable Agriculture Programme (MAF) are providing support to initiatives directed towards sustainable agriculture throughout the country.

3. Major Groups: A significant part of the responsibility for land management lies with local authorities and community groups. For example, fifty-five Landcare, community-based groups have been established throughout the country to collaboratively address local problems; Federated Farmers of New Zealand is involved in several projects directed towards establishing farm based indicators of sustainable land management; Womens' Division of Federated Farmers is preparing a resource kit aimed at assisting the establishment of community based groups; and the Rural Futures Trust is promoting the adoption of Decision Support Systems and sponsoring the development of ecologically based condition assessment models as tools for better farm management decisions.

4. Finance: The Minister for the Environment's Sustainable Management Fund is providing project support for a broad range of resource management activity, including farmer-based sustainable land management initiatives.

5. Regional/International Cooperation:

AGENDA 21 CHAPTER 11: COMBATING DEFORESTATION

NATIONAL PRIORITY:

STATUS REPORT: New Zealand's forests cover about 28% (or 7.5 million hectares) of the country's land area. Of this, 6.2 million hectares is natural forest, and 1.3 million hectares, planted forest.

The State owns 4.9 million hectares of the country's natural forest. Most of this is managed for conservation values. Only 164,000 hectares of it is managed for wood production. Under the Forest Amendment Act 1993, areas of natural forest that are used for production must be managed in way that maintains the ability of the forest to continue to provide a full range of products and amenities in perpetuity while retaining the forest's natural values

Voluntary measures that enhance the protection and sustainable management of New Zealand's forest resources include the New Zealand Forest Code of Practice and the New Zealand Forest Accord. The Forest Heritage Trust Fund and Nga Whenua Rahui were established by Government to help achieve the objectives of the Government's Indigenous Forest Policy.

The ownership of New Zealand's planted forests has undergone considerable change since 1990, with the sale of timber and management rights to much of the State's forest resource. (The State did not sell the land.) Before 1990, the State owned about half the planted forest. From 1 April 1993, the State owned, or had a commitment to manage, about 20% of the resource: 75% is owned by seven major corporates, with considerable offshore investment, while about 23% is owned by small companies, local government bodies, partnerships, joint ventures, and farmers.

The area of planted forest is currently increasing at about 80,000 hectares per annum, and this rate may be maintained for the next 20 to 30 years. If this happens, New Zealand's planted forests would account for more than 4 million hectares by 2020.

New Zealand is actively involved in the Montreal Process to develop indicators of sustainable forest management. Domestically, forests are included in New Zealand's National Environmental Indicators Programme being coordinated by the Ministry for the Environment.

Cross-Sectoral Issues

1. Decision-Making Structure:

2. Capacity-Building/Technology Issues: On 1 July 1992, a Crown Research Institute called the New Zealand Forest Research Institute was established to carry out research for the development of New Zealand's forestry products. Research on sustainable management of land resources is provided by other Crown Research Institutes, including Landcare Research Limited. Forestry is one of the priority areas for science funding, with special emphasis given to forest processing research.

Universities and tertiary educational institutions are responding to student interest in forestry by developing an array of forestry-related courses.

3. Major Groups: Maori are significant players in the New Zealand forestry sector. There are approximately 7,000 hectares of Maori controlled forest, and a further 140,000 hectares of forestry on Maori owned land. In some regions of New Zealand, this involvement is more significant, for example in Northland, where Maori forestry holdings make up more than 25 % of the planted estate. Increasingly, Maori see forestry as a significant vehicle for sustainable capital development to benefit both current and future generations and, in some of the Maori areas, new tribal-based forest companies are emerging.

The Imported Tropical Timber Group (ITTG) was formed in response to concern by the New Zealand public, timber trade and conservation NGOs over the link between the import of tropical timbers and unsustainable logging of tropical forests. Since 1991, the ITTG, representing New Zealand conservation organisations, timber importers, and building supply retailers, with the Ministry of Forestry as observer, has been assisting the transition of the New Zealand trade to certified sustainable sources of imported tropical timbers.

4. Finance: The Government has signalled its desire to promote investment in forest growth through its taxation regime. New Zealand's tax system is such that the costs incurred by a forestry business in planting, tending and maintaining a crop of trees are fully deductible from income of any source in the same year costs are incurred. This system replaced the previous system whereby forest growing costs were deferred until an income was generated from the harvest of that forest. Thus, forest product businesses are now treated in the same way as other businesses in terms of taxation.

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1985	1990	Latest 1995-	
Forest Area (Km^2)	71,800	73,500	78,900	
Protected forest area			49,000	
Roundwood production (solid volume of roundwood without bark in mill m^3)	9.8	12.0	16.4	
Deforestation rate (Km^2/annum)				
Reforestation rate (Km^2/annum)	430 [1]		710	
Other data				

[1] Average 1980s.

AGENDA 21 CHAPTER 12: MANAGING FRAGILE ECOSYSTEMS: COMBATING DESERTIFICATION AND DROUGHT

NATIONAL PRIORITY:

STATUS REPORT:

International Convention to Combat Desertification in Countries Experiencing Drought and/or Desertification Particularly in Africa

Each party shall file reports on implementation with the Conference of Parties, as often and in the form to be determined. Parties are to report on development of national action programmes. The Conference shall assist affected developing countries to make reports.

- Convention has not been signed.

Additional comments relevant to this chapter New Zealand does not have any specific legislation related to desertification and drought.

Prolonged droughts are relatively uncommon in New Zealand. Climate is influenced by the country's latitude, shape, geographical isolation, and topography, resulting in mild temperatures and year-round wind and rainfall in most areas. Two areas of New Zealand, the east coast of the North Island and the South Island high country, however, are prone to drought. The dry tussock grasslands of the South island high country, characterised by high rugged mountains, extensive basins and river flats, have a "continental", highly variable climate, with extremes of heat and cold, and some parts are in danger of becoming a desert. This is due to a combination of factors including climate, the invasion of hawkweeds, high rabbit populations, and the inappropriate use of some land. This area is classified as semi-arid.

Consistent with the government's economic policies, individual landholders accept that they must manage climatic risks. Support is available when an adverse event such as drought is beyond the ability of the local community to deal with, but is provided in a manner that does not reduce individual responsibility for managing risk.

In 1989, the Rabbit and Land Management Programme (RLMP) was established to address the complex bio-physical, economic, social, legal, and institutional issues surrounding the sustainable use of lands in highly rabbit-prone areas. The Rabbit and Land Management Programme addressed serious land degradation on approximately 400,000 hectares of dry tussock grasslands in the South Island high country, about one-eighth of the pastorally occupied high country of the South Island. The RLMP is now completed, but research in this area continues.

New Zealand is currently focusing on: developing land user, community, research, and agency partnerships to define, achieve and reach consensus on resource protection objectives; development of long-term community-based resource monitoring systems that can meet the needs of land users and regulatory agencies; research at the ecosystem/ land use system level and processes and mechanism for information exchange both within land user communities and between research, education and agency interests.

Cross-Sectoral Issues

1. Decision-Making Structure: The main government agency responsible for mitigating the effects of drought is the Ministry of Agriculture.

Other Government departments involved in the South Island high country and the east coast of the North Island, but not directly involved in combating desertification are; the Department of Conservation in respect to crown-owned land; Terra link New Zealand Limited (formerly part of the Department of Land and Survey Information) in respect of land mapping and use monitoring; and the New Zealand Meteorological Service for meteorological and hydrological monitoring. In addition, the Ministry of Forestry administers forestry initiatives in the east coast of the North Island.

2. Capacity-Building/Technology Issues:

3. Major Groups: An important outcome of RLMP has been the involvement of high country farmers in monitoring their land and their recognition of the need to know more about long-term trends in the health of their soils and plants, the performance of their stock and the damage done by pests and weeds.

4. Finance: Government expenditure on disaster relief, which includes flooding, drought and hail/snow storms has declined from NZ$72 million in 1988/89 to NZ$5.6 million in 1992/93.

Central government funding for the RLMP averaged NZ$3.5 million per year for the 5-year programme. This provided approximately 50 % of funding, with roughly 25% each coming from regional councils and participating landholders. The programme ended in June 1995.

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199_
Land affected by desertification (Km^2)			
Other data			

AGENDA 21 CHAPTER 13: MANAGING FRAGILE ECOSYSTEMS: SUSTAINABLE MOUNTAIN DEVELOPMENT

NATIONAL PRIORITY:	
STATUS REPORT: Please refer to Chapter 12.	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 14: PROMOTING SUSTAINABLE AGRICULTURE AND RURAL DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT:

The Government's *Environment 2010 Strategy* identifies several areas posing environmental and long-term productive capacity risks for land use. Theses include - land degradation as a result of soil erosion, soil compaction and other factors; rundown in soil health; and effects of water quality and availability.

Actions required for managing land resources include - to encourage land management practices that reduce soil loss, and maintain or enhance the quality of waterways, groundwater, and coastal waters and protect them from suspended sediments, nutrients, harmful microorganisms and other contaminants; to avoid, mitigate, and remedy the impacts of land-related hazards, including flooding, subsidence, and erosion; and to develop land management skills and land use systems that will enable people and communities to provide for their social and economic wellbeing.

Several joint initiatives between MAF and other key departments address these actions. The initiatives include the New Zealand Sustainable Land Management Strategy, and the development of a National Science Strategy (NSS) for Sustainable Land Management (SLM). Within MAF's Sustainable Agriculture Facilitation Programme current work, and the strategy through to the year 2000, is focused on the following key themes: achieving consistent implementation of local government policies and plans developed under the Resource Management Act and the Biosecurity Act, including attention to participation processes; facilitating the brokerage of information and decision support tools and technologies for sustainable agriculture; encouraging the inclusion of sustainable agriculture principles in mainstream education; and providing well targeted and appropriate operational research - particularly on understanding the factors contributing to sustainable agriculture systems; the development of management planning and decision support systems; and collaborative, participatory community research to support the uptake of sustainable technology and management practices.

The National Science Strategy for Sustainable Land Management, established by Government this year, is an integral part of the overall Sustainable Land Management Strategy announced by Government, and coordinated by the Ministry for the Environment.

The NSS is developed and implemented by a central and three regional committees. A task of the committees will be to improve the still poor understanding of many New Zealander's land resources and how human activities affect them, and the long term monitoring and assessment of environmental trends, through coordinated science. The committees will also have the key roles of monitoring, coordinating, and advocating science which enhances sustainable land management. They will seek to strengthen the links between science, policy, and land management, enhancing the transfer of the findings of land management research to land users and policy makers.

The central committee is funded by central government. The agencies involved are MORST, MAF, MOF, DOC, FRST, Regional councils, and other key stakeholders including commercial land users, NGOs, and the science community.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS				
	1985	**1990**	**Latest 199_**	
Agricultural land (Km^2)	143,920	139,020		
Agricultural land as % of total land area	53.1	51.3		
Agricultural land (m^2 per capita	44,324	41,338		
	1989/90	**1992/93**	**Latest 199_**	
Consumption of fertilizers per (Kg/Km^2 of agricultural land as of 1990)	2,704	3,740		
Other data				

AGENDA 21 CHAPTER 15: CONSERVATION OF BIOLOGICAL DIVERSITY

NATIONAL PRIORITY:

STATUS REPORT:

Convention on Biological Diversity

Parties are to develop national strategies, plans and programmes for sustainable use and conservation of biodiversity and integrate them into general development plans.
Parties shall identify, monitor and maintain data on components of biodiversity.
Parties shall introduce appropriate procedures requiring EIAs for projects likely to have significant adverse effects on biological diversity.
Parties shall submit reports on measures which it has taken for the implementation of the Convention, at intervals to be determined.

- The Convention was signed in 1992; ratified on 16 September 1993.
- No report has been submitted..

Convention on International Trade in Endangered Species of Wild Fauna and Flora

Parties to take appropriate measures to enforce regulatory provisions and prohibit trade in specimens in violation thereof. Convention also governs treatment of animals in shipment.
Each party to prepare periodic reports on its implementation of the convention and to prepare: (a) an annual report listing export permits issued and species involved, and (b) a biennial report on legislative, regulatory and administrative measures taken.

- Convention ratified on 8 August 1989
- No report has been submitted.

Additional comments relevant to this chapter

The Government of New Zealand undertook a careful analysis of its legislation and policies before ratifying the Convention on Biological Diversity (CBD) in September 1993. In doing so, it considered the status and management of its forests and related dependent ecosystems and species. The protected forested areas provide a significant contribution to *in situ* conservation of New Zealand's biodiversity. The measures that are available under a variety of other legislation (e.g. the Resource Management Act) and agreements (e.g. the Forest Accord) ensure that any use of those forest resources not currently protected, is sustainable and does not contribute to the loss of biodiversity, or result in land degradation.

Key issues under action in relation to the Convention include the development of a national biodiversity strategy; investigating the possible establishment of a National Science Strategy for biodiversity; enhancing public and industry awareness of the Convention and of New Zealand's indigenous and endemic biodiversity; measures to address the impacts of harmful alien species; and approaches to ensuring access to genetic resources are based on mutually agreed terms.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS			
	1992	Latest 199_	
Protected area as % of total land area	11.0		
	1990	Latest 199_	
Number of threatened species	263		
Other data			

AGENDA 21 CHAPTER 16: ENVIRONMENTALLY SOUND MANAGEMENT OF BIOTECHNOLOGY

NATIONAL PRIORITY:

STATUS REPORT: In New Zealand the management and control of hazardous substances and new organisms, including those derived from biotechnology, has been done by several agencies and under several different laws.

Until recently there was no legislation in New Zealand that specifically covered GMOs.

The lack of specific legislation for the management of modern biotechnology was instrumental in prompting the reform and drafting of new legislation covering both hazardous substance and new organisms. The control and use of biotechnology has been an integral part of this law reform.

The Hazardous Substances and New Organisms (HSNO) Bill introduced to Parliament in November 1994 was enacted on 10 June 1996. The HSNO Act provides for a coherent overall system for the management of hazardous substances and new organisms so as to provide for the health and safety of people and the environment.

It is the result of long and careful consultation with many sectors of the community.

Among matters of importance spelt out in the Act are: - avoiding or mitigating any harmful effects of new organisms on the environment; and in particular on all native and valued introduced flora and fauna; protecting the health and safety of people and communities and their capacity to provide for their social, economic and cultural well being; the relationship of Maori and their customs and traditions with their ancestral lands, water, waahi tapu (sacred sites), valued flora and fauna, and other taonga (treasure); kaitiakitanga (the exercise of guardianship; and in relation to a resource, includes the ethic of stewardship based on the nature of the resource itself); and the taking into account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

To administer the legislation, the HSNO Act establishes a new agency, the Environmental Risk Management Authority (ERMA). The ERMA is responsible for assessing hazardous substances and new organisms, including GMOs, before they are manufactured, developed, imported or released into the New Zealand environment.

Until the ERMA is fully operational, the Ministry for the Environment will continue its responsibilities for administration of two advisory committees: - the Advisory Committee on Novel Genetic Techniques (ACNGT), which is responsible for contained laboratory and glasshouse manipulation work; and the Interim Assessment Group (IAG) for the field testing or release of genetically modified organisms (GMOs)

In summary, New Zealand has responded to the advent of biotechnology by establishing mechanisms, comparable to similar developments overseas, to safeguard the environmental and public health concerns against possible consequences of an undesirable GMO release into the environment, but at the same time allowing research and development to proceed.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 17: PROTECTION OF THE OCEANS, ALL KINDS OF SEAS, INCLUDING ENCLOSED AND SEMI-ENCLOSED SEAS, AND COASTAL AREAS AND THE PROTECTION, RATIONAL USE AND DEVELOPMENT OF THEIR LIVING RESOURCES

NATIONAL PRIORITY:

STATUS REPORT:

The UN Convention on the Law of the Sea: Ratified on 18 August 1996.

See also the attached tables on the next pages.

New Zealand is an island nation and the majority of its population live on or very close to the coast. The coast has been the traditional place of settlement for New Zealanders. It is a source of food, a major transport link, an economic resource, and a place of relaxation.

The Territorial Sea and Exclusive Economic Zone Act 1977 establishes New Zealand's jurisdiction over the 12 nautical mile territorial sea and 200 nautical mile exclusive economic zone (EEZ) around New Zealand. It provides for the exploration, exploitation, conservation, and management of resources within the EEZ. New Zealand is currently in the process of delineating its continental margins.

The Resource Management Act 1991 restates and reforms the law relating to the use of land, air, and water. The purpose of the Act is to promote the sustainable management of natural and physical resources. It identifies coastal management as being of particular importance and simultaneously defines a new regime for the coastal marine area which extends to the outer edge of the territorial sea. The focus is on controlling adverse effects of activities on the environment and managing conflict between competing uses of the coastal space.

The other major statutes covering the coastal marine area are the Marine Reserves Act 1971, the Maritime Transport Act 1994, the Wildlife Act 1953, the Marine Mammals Protection Act 1978, and the Fisheries Act 1983/ Fisheries Act 1996.

The Fisheries Act 1996 provides for the utilisation of fisheries resources while ensuring sustainability and recognises New Zealand's international obligations relating to fishing. The major features of the new Act are: - the adoption of an ecosystem-based approach to fisheries management; a clear annunciation of the precautionary approach; greater stakeholder involvement in decision-making through open consultation processes; interfaces with other statutes controlling the incidental deaths of protected species such as sea birds and marine mammals; consolidation of the quota management system as the primary means of controlling fishing; and giving effect to indigenous fishing rights as provided for in the Treaty of Waitangi (Fisheries Claims) Settlement Act 1992.

Future policy initiatives will focus on mechanisms to promote self-management by stakeholders and better providing for fisheries enhancement in the quota management system.

The major policy mechanism for commercial fishing is the Quota Management System. Each year, a Total Allowable Catch, based on sustainable harvesting limits, is set for each fish stock in the system. Management plans have been developed for some fisheries under the Quota Management System and there are some voluntary codes of practices.

New Zealand's initial oil spill response strategy was prepared in 1992 and is currently being reviewed by the Maritime Safety Authority (MSA) to reflect the Maritime Transport Act 1994, which provides the legislative structure to implement such a strategy. In addition a National Oil Spill Contingency Plan is being developed. A stock of oil spill response equipment is being purchased and distributed to the regions. New Zealand is currently working through the process of setting a domestic framework in place to allow ratification of MARPOL.

The Government is developing a National Ballast Water Strategy to reduce the risk of introductions of unwanted organisms into New Zealand waters

[Please see below for details on the London Convention.]

Cross-Sectoral Issues

1. Decision-Making Structure: Under the RMA, coastal management is a partnership between the Minister of Conservation as an agent of the Crown, and the regional and district councils. Responsibility for the majority of day to day decision making has been passed to regional and district councils. The Minister of Conservation is charged with the identification of Areas of Significant Conservation Value and regional and district councils identify elements at the local level that require protection.

The RMA established a new coastal planning hierarchy. Under the Act is the New Zealand Coastal Policy Statement (NZCPS), which provides guidance to regional and district councils on the requirements of the RMA and of Government policy decisions. Each region must then develop a regional policy statement, that both picks up the requirements of the Act and is not inconsistent with the NZCPS.

The RMA defined sustainable management to include use, development, and protection. RMA plans and policy statements are important instruments in protecting the environment. This is particularly true in the coastal marine area where there are fewer protected areas than on land. The NZCPS provides guidance on elements in the coastal environment that are nationally important and should be protected. It also identifies restoration and rehabilitation of the coastal environment as being a national priority.

In practice, both the Ministry of Fisheries and regional councils may regulate or restrict activities in the marine environment, but for different purposes. For example, a resource consent under the Resource Management Act would be required by an aquaculturist who wished to place structures in the sea or exclude other users of the marine environment from a particular area. The aqauculturist would also have to obtain a commercial harvesting permit from the Ministry of Fisheries.

The Maritime Transport Act 1994 makes provisions relative to the protection of the marine environment from harmful substances and marine oil spills.

2. Capacity-Building/Technology Issues:

3. Major Groups: Local Authorities play an important role, through regional and district councils in particular.

Consultation with the public is an important factor in helping to achieve coordination and consistency in different sectoral programs. During the development of plans and policy statements, it is a legislative requirement. To aid this process and in the interests of raising general public awareness, many local authorities carry out campaigns at the regional and local level.

Sustainable management of fisheries provides for both commercial and non-commercial harvesting of fish. Maori fishing rights guaranteed under the Treaty of Waitangi are included within this framework.

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 1995-	
Catches of marine species (metric tons)(tonnes) (Domestic & foreign fishers)			475,062	
Population in coastal areas				
Population served by waste water treatment (% of country's total population)				
Discharges of oil into coastal waters (metric tons)				
Releases of phosphate into coastal waters (metric tons)				
Releases of nitrate into coastal waters (metric tons)				
Other data				

Chapter 17 (Oceans) Continued:

Check the boxes in the column below left:
For level of importance use:
*** = very important
** = important
* = not important
N = not relevant

Check the boxes in the column below right:
For level of implementation use:
*** = fully covered
** = well covered - gaps being addressed
* = poorly covered
O = not covered
N = not relevant

TABLE I. THE FOLLOWING ACTIVITIES HAVE BEEN CONSIDERED BY THE APPROPRIATE COORDINATING MECHANISM FOR INTEGRATED MANAGEMENT AND SUSTAINABLE DEVELOPMENT OF COASTAL AND MARINE AREAS AND THEIR RESOURCES.

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	a. Preparation and implementation of land and water use and siting policies.	
	b. Implementation of integrated coastal and marine management and sustainable development plans and programmes at appropriate levels.	
	c. Preparation of coastal profiles identifying critical areas including eroded zones, physical processes, development patterns, user conflicts and specific priorities for management.	
	d. Prior environmental impact assessment, systematic observation and follow-up of major projects, including systematic incorporation of results in decision-making.	
	e. Contingency plans for human induced and natural disasters.	
	f. Improvement of coastal human settlements, especially in housing, drinking water and treatment and disposal of sewage, solid wastes and industrial effluents.	
	g. Periodic assessment of the impacts of external factors and phenomena to ensure that the objectives of integrated management and sustainable development of coastal areas and marine environment are met.	
	h. Conservation and restoration of altered critical habitats.	
	I. Integration of sectoral programmes on sustainable development for settlements, agriculture, tourism, fishing, ports and industries affecting the coastal areas.	
	J. Infrastructure adaptation and alternative employment.	
	K. Human resource development and training.	
	L. Public education, awareness and information programmes.	
	M. Promoting environmentally sound technology and sustainable practices.	
	N. Development and simultaneous implementation of environmental quality criteria.	

TABLE II. TECHNOLOGY (MARINE ENVIRONMENT)

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	A. Apply preventive, precautionary and anticipatory approaches so as to avoid degradation of the marine environment, as well as to reduce the risk of long-term or irreversible adverse effects upon it.	
	B. Ensure prior assessment of activities that may have significant adverse impacts upon the marine environment.	
	C. Integrate protection of the marine environment into relevant general environmental, social and economic development policies.	
	D. Develop economic incentives, where appropriate, to apply clean technologies and other means consistent with the internalization of environmental costs, such as the polluter pays principle, so as to avoid degradation of the marine environment.	
	E. Improve the living standards of coastal populations, particularly in developing countries, so as to contribute to reducing the degradation of the coastal and marine environment.	
	F. Effective monitoring and surveillance within the exclusive economic zone (EEZ) of fish harvesting and transportation of toxic and other hazardous materials.	

TABLE III. SEWAGE RELATED ISSUES

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	A. Sewage related problems are considered when formulating or reviewing coastal development plans, including human development plans.	
	B. Sewage treatment facilities are built in accordance with national policies.	
	C. Coastal outfalls are located so as to maintain acceptable level of environmental quality and to avoid exposing shell fisheries, water intakes and bathing areas to pathogens.	
	D. The Government promotes primary treatment of municipal sewage discharged to rivers, estuaries and the sea, or other solutions appropriate to specific sites.	
	E. The Government supports the establishment and improvement of local, national, subregional and regional, as necessary, regulatory and monitoring programmes to control effluent discharge. Minimum sewage effluent guidelines and water quality criteria are in use.	

TABLE IV. OTHER SOURCES OF MARINE POLLUTION, THE GOVERNMENT HAS:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	A. Established or improved upon, as necessary, regulatory and monitoring programmes to control emissions, including recycling technologies.	
	B. Promoted risk and environmental impact assessments to help ensure an acceptable level of environmental quality.	
	C. Promoted assessment and cooperation at the regional level, where appropriate, with respect to the input of point source pollutants from the marine environment.	
	D. Taken steps to eliminate emissions or discharges of organohalogen compounds from the marine environment.	
	E. Taken steps to eliminate/reduce emissions or discharges or other synthetic organic compounds from the marine environment.	
	F. Promoted controls over anthropogenic inputs of nitrogen and phosphorous that enter coastal waters where such problems as eutrophication threaten the marine environment or its resources.	
	G. Taken steps to develop and implement environmentally sound land-use techniques and practices to reduce run-off to water courses and estuaries which would cause pollution or degradation of the marine environment.	
	H. Promoted the use of environmentally less harmful pesticides and fertilizers and alternative methods for pest control, and considered the prohibition of those found to be environmentally unsound.	
	I. Adopted new initiatives at national, subregional and regional levels for controlling the input of non-point source pollutants which require broad changes in sewage and waste management, agricultural practices, mining, construction and transportation.	
	J. Taken steps to control and prevent coastal erosion and siltation due to anthropogenic factors related to, inter alia, land-use and construction techniques and practices.	

TABLE V. ADDRESSING CRITICAL UNCERTAINTIES FOR THE MANAGEMENT OF THE MARINE ENVIRONMENT AND CLIMATE CHANGE. IN ORDER TO IMPLEMENT THIS PROGRAMME AREA THE GOVERNMENT IS CARRYING OUT THE FOLLOWING ACTIVITIES:

LEVEL OF IMPORTANCE	ACTIVITY AS DESCRIBED IN AGENDA 21	LEVEL OF IMPLEMENTATION
	A. Coordinating national and regional observation programmes for coastal and near-shore phenomena related to climate change and for research parameters essential for marine and coastal management in all regions.	
	B. Providing improved forecasts of marine conditions for the safety of inhabitants of coastal areas and for the efficiency of marine operations.	
	C. Adopting special measures to cope with and adapt to potential climate change and sea-level rise.	
	D. Participating in coastal vulnerability assessment, modelling and response strategies particularly for priority areas, such as small islands and low-lying and critical coastal areas.	
	E. Identifying ongoing and planned programmes of systematic observation of the marine environment, with a view to integrating activities and establishing priorities to address critical uncertainties for oceans and all seas.	
	F. Research to determine the marine biological effects of increased levels of ultraviolet rays due to the depletion of the stratospheric ozone layer.	
	G. Carrying out analysis, assessments and systematic observation of the role of oceans as a carbon sink.	

TABLE VI. RATING OF ACTIVITIES IN THE AIR AND MARITIME TRANSPORT SECTORS IN THE SMALL ISLANDS DEVELOPING STATES (SIDS)

AIR TRANSPORT	RATING	MARITIME TRANSPORT	RATING
1. Frequency (external flights)		1. Frequency (external shipping)	
2. Frequency (in-country flights)		2. Frequency (in-country shipping)	
3. Cooperation at regional level in air transport and civil aviation		3. Cooperation at regional level in shipping	
4. Cooperation at international level		4. Cooperation at international level	
5. Economic viability of national air line		5. Economic viability of national shipping line(s)	
6. Economic viability of regional air line		6. Economic viability of regional shipping line (s)	
7. national level training in skills for air transport sector		7. National level training in skills for maritime transport sector	
8. Access to training in skills for air transport sector within the region		8. Regional level training in skills for maritime transport sector	
9. Access to international training for air transport sector		9. Access to international training for maritime transport sector	
10. Supportive of ICAO			

AGENDA 21 CHAPTER 18: PROTECTION OF THE QUALITY AND SUPPLY OF FRESHWATER RESOURCES: APPLICATION OF INTEGRATED APPROACHES TO THE DEVELOPMENT, MANAGEMENT AND USE OF WATER RESOURCES

NATIONAL PRIORITY:	
STATUS REPORT: New Zealand complies with virtually all the relevant recommendations for activities in relation to water management. This is primarily due to the infrastructure established under the Soil Conservation and Rivers Control Act 1941. Under the Resource Management Act, management and data collection are the primary responsibility of regional councils. However, work developed under State of the Environment reporting and Environmental Indicators Programme will help to provide standardisation of data collection as well as a national environmental oversight. Priority areas in the protection of freshwater include: establishing guidelines which maintain the biophysical "bottom line" needs of water quality and quantity; promoting integrated land and water management, because catchment management influences water quality and quantity; developing and implementing management techniques that give users clear incentives to conserve the quality and quantity of water; encouraging land owners to adopt sustainable land management practices which limit effects on aquatic systems; encouraging agriculture and industry to adopt techniques such as the recycling of waste water, so that they use water more efficiently and produce less waste.	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 199-	
Fresh water availability (total domestic/external in million m^3)				
Annual withdrawal of freshwater as % of available water				
Other data				

AGENDA 21 CHAPTER 19: ENVIRONMENTALLY SOUND MANAGEMENT OF TOXIC CHEMICALS, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN TOXIC AND DANGEROUS PRODUCTS

NATIONAL PRIORITY:	
STATUS REPORT: Over the last 5 years, work has been undertaken to improve current systems for managing both hazardous substances and new organisms. The result of this work is the Hazardous Substances and New Organisms legislation which became law on 10 June 1996. This legislation was prepared with extensive consultation with all stakeholders. The objective of the legislation is to establish a streamlined and up-to-date system, able to respond quickly to advances in technology, for managing hazardous substances and new organisms and their potential risks. Under the new legislation, all hazardous substances and new organisms will be assessed prior to their introduction, development or manufacture in New Zealand, using a public assessment process. The purpose of the legislation is to manage the risks from hazardous substances and new organisms, and to protect the environment and people's health, safety and economic, social, and cultural well-being. An Environmental Risk Management Authority (ERMA) has been established as part of the legislation. ERMA is a regulatory authority which will approve, decline or attach conditions to the importation or manufacture of any new substances or new organisms; approve or endorse codes of practice; design procedures for the control of hazardous substances; and promote information about standards, compliance, and the maintenance and monitoring of these standards. It will operate independently, subject to Ministerial policy direction. A risk based approach, for the assessment and management of contaminated sites has been done, based on the Australian and New Zealand Environment and Conservation Council (ANZECC) guidelines. For example, draft guidelines have been prepared in consultation with regional councils and the timber industry for selected timber chemicals. These guidelines provide the maximum acceptable levels of timber treatment chemicals that can remain in soil and water and set the necessary targets for clean-up. Investigations are underway into treatment and disposal options for organochlorin wastes. Specific disposal agreements with other OECD countries are in place for the disposal of certain hazardous wastes. A "Green Package", announced as part of the 1996 Budget, also included funding to address hazardous waste management through the development of hazardous waste acceptance criteria for landfills. In August 1996 the Local Government Amendment Act No 4 was passed. This legislation incorporates the hierarchy of waste management actions (reduction, reuse, recycling, recovery, treatment, and disposal); requires the development of waste management plans by district and city councils, allows the regulation of collection of waste, and provides the ability to levy fees and disposal charges for waste management. The Ministry for the Environment supports seven demonstration projects on cleaner production techniques, in cooperation with industry and local governments. A "Cleaner Production" booklet which outlines a range of industry case studies has been published. The Ministry also promotes the establishment of further cleaner production projects by local governments and sector groups, and provides advice to councils involved in cleaner production programmes. A manual for industry and councils is being developed.	

Cross-Sectoral Issues

1. Decision-Making Structure:

2. Capacity-Building/Technology Issues: A study by the Ministry for the Environment has identified a range of sites which, based on past uses, could be contaminated with hazardous substances that may pose a risk to the health of people and ecosystems. These sites cover a wide range of activities, including uses such as service stations.

3. Major Groups Industry takes a leading role in dealing with chemicals and hazardous wastes. For example, the Chemical Industry Council has a Responsible Care programme for the management of hazardous wastes and chemicals. The oil industry, in conjunction with the relevant government agencies, has produced a guide to the installation of underground storage tanks. This work will be extended to address the removal of old tanks, site remediation, and sampling standards.

Regional councils, assisted by subsidies from central government, are currently following up this study by carrying out extensive surveys of potentially contaminated sites in their regions. These surveys will help identify specific sites, evaluate risks and develop appropriate containment, remediation and "clean-up" responses.

4. Finance:

5. Regional/International Cooperation: New Zealand is Party to the London Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter (1972). New Zealand has not yet adopted a position on the November 1996 Protocol to the London Convention.

New Zealand attaches importance to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which it ratified on 20 December 1994..

New Zealand ratified the Copenhagen Amendment to the Montreal Protocol on 4 June 1993

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTER 20: ENVIRONMENTALLY SOUND MANAGEMENT OF HAZARDOUS WASTES, INCLUDING PREVENTION OF ILLEGAL INTERNATIONAL TRAFFIC IN HAZARDOUS WASTES

NATIONAL PRIORITY:

STATUS REPORT:

The Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal

Parties shall cooperate to disseminate information on transboundary movement of hazardous wastes. Parties shall cooperate to promote environmentally sound low-waste technologies, to transfer technology and cooperate in developing codes of practice. Parties to assist developing countries.
Parties shall immediately inform affected parties as to accidents. Prior to the end of each calendar year, parties shall provide the following information on the preceding calendar year: (a) the authorities handling Convention matters; (b) information regarding the transboundary movement of hazardous wastes; (c) measures adopted to implement convention; (d) available statistics on human health and environmental effects of generation, transport and disposal of hazardous wastes; (e) information on agreements entered into; (f) information on accidents; (g) information on disposal options; and (h) information on development of waste-reduction technologies;

- Basel Convention: ratified on 20 December 1994

No information has yet been provided to the Basel Convention Secretariat.

Additional comments relevant to this chapter

Please refer to Chapter 19 for information on this chapter.

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 199-	
Generation of hazardous waste (t)				
Import of hazardous wastes (t)				
Export of hazardous wastes (t)				
Area of land contaminated by hazardous waste (km^2)				
Expenditure on hazardous waste treatment (US$)				
Other data				

AGENDA 21 CHAPTER 21: ENVIRONMENTALLY SOUND MANAGEMENT OF SOLID WASTES AND SEWAGE-RELATED ISSUES

NATIONAL PRIORITY:	
STATUS REPORT: It has been estimated that New Zealand produces about 750-800 kg of municipal waste per person annually. In addition, industry is also a major waste producer with estimates ranging between 300,000 tonnes annually (a 1980s figure) and 600,000 to 1,000,000 tonnes annually (current estimates). Information on the precise nature of the waste stream in New Zealand is poor and a Waste Analysis Protocol has been developed to provide a standard measurement system. This has been promoted to local authorities at a series of seminars around the country. A software package has also been developed to make the Protocol easier to use and make national data available. Information on solid waste is being collated for the first national data report due out next year. The further development of a more comprehensive database will be considered as part of the development of national environmental indicators for waste. Additional funding has been provided through the "Green Package", announced as part of the 1996 Budget, for guidelines on landfills; guidance has also been provided on charging methodologies for landfills. At the individual level, the aim of New Zealand's waste management strategy is to minimise waste, reuse resources, and adopt alternative means of disposal (eg making compost). At the industry level, the objective is to "ensure that, wherever practicable, waste generators meet the costs of waste management." In 1996 the Local Government Act No 4 was passed. This legislation incorporates the hierarchy of waste management (reduction, reuse, recycling, recovery, treatment, disposal), requires the development of waste management plans by district and city councils; allows the regulation of collection of waste, and provides the ability to levy fees and disposal charges for waste management. The Government has signed an accord with the packaged goods industry, and assisted the oil industry to put in place a national Used Oil Recovery Programme. Regulatory and economic mechanisms will be pursued to back up voluntary initiatives The Sustainable Management Fund (SMF), administered by the Ministry for the Environment, has supported several cleaner production projects to encourage innovation and adoption of cleaner production methods and technologies by industries and sectors such as pipfruit, fishing, and hospitals. MFE is developing regulations for the disposal of sewage from ships within New Zealand's territorial waters.	

Cross-Sectoral Issues

1. Decision-Making Structure:

2. Capacity-Building/Technology Issues:

3. Major Groups: The Resource Management Act provides part of the framework for dealing with waste issues. Many regional and local councils are developing policies and plans for waste management with advice from th : Ministry for the Environment. The Ministry has produced a "Landfill Guideline" for use by local governments and industry. This provides advice on landfill siting, design, operation, and aftercare. It also discusses evaluation and assessment of environmental impacts for existing and closed landfills.

The Department of Internal Affairs and the Ministry for the Environment promoted an amendment to the Local Government Act 1974 to clarify the powers of territorial authorities to promote and implement waste minimisation.

4. Finance:

5. Regional/International Cooperation:

STATISTICAL DATA/INDICATORS

	1980	1990	Latest 199-	
Generation of industrial and municipal waste (t)				
Waste disposed(Kg/capita)				
Expenditure on waste collection and treatment (US$)				
Waste recycling rates (%)				
Municipal waste disposal (Kg/capita)				
Waste reduction rates per unit of GDP (t/year)				
Other data				

AGENDA 21 CHAPTER 22: SAFE AND ENVIRONMENTALLY SOUND MANAGEMENT OF RADIOACTIVE WASTES

NATIONAL PRIORITY:	
STATUS REPORT: New Zealand ratified the South Pacific Nuclear Free Zone Treaty and protocols on 13 November 1986.	

Cross-Sectoral Issues

1. **Decision-Making Structure:**

2. **Capacity-Building/Technology Issues:**

3. **Major Groups:**

4. **Finance:**

5. **Regional/International Cooperation:**

STATISTICAL DATA/INDICATORS

AGENDA 21 CHAPTERS 23-32: MAJOR GROUPS

The role of major groups are also covered under the various chapters of Agenda 21. The following is a summary of main objectives outlined in Agenda 21. Please check the appropriate boxes and describe briefly any important steps or obstacles.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 24: GLOBAL ACTION FOR WOMEN TOWARDS SUSTAINABLE AND EQUITABLE DEVELOPMENT.
The Convention on the Elimination of All Forms of Discrimination Against Women was

signed on 17 July 1980 and ratified on 10 January 1985

24.b Increasing the proportion of women decision makers.
The percentage of women in parliament has increased from 14% in 1989, to 16.5% in 1990 and 29% in 1996.
At the local government level there was 35% representation in City Councils and 21% in District Councils in 1989.

24.2.e assessing, reviewing, revising and implementing curricula and other educational material with a view to promoting dissemination of gender-relevant knowledge.

24.2.f and 24.2.c formulating and implementing policies, guidelines, strategies and plans for achievement of equality in all aspects of society including issuing a strategy by year 2000 to eliminate obstacles to full participation of women in sustainable development. Policies/strategies etc. have been

24.2.d establishing mechanisms by 1995 to assess implementation and impact of development and environment policies and programmes on women

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

New Zealand continues to give priority to ensuring that ODA activities foster the role of women in development. The ODA program recognises that the roles that women play, their economic contribution, and the constraints on their time and activity, are essential factors in sustainable development.

The long term goal of the Women in Development Policy (WID), adopted in 1992, continues to be the "WID-integration" of all NZODA funded projects. A WID Action Plan was developed in 1994 to implement this policy.

A review of the WID Action Plan, carried out in October 1995, concluded that significant progress had been made both in terms of increasing support for WID specific activities and in integrating gender considerations into all projects and programs.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 25: CHILDREN AND YOUTH IN SUSTAINABLE DEVELOPMENT.

25.4 establishing processes that promote dialogue between the youth and government at all levels and mechanisms that permit youth access to information and opportunity to present their views on implementing A21.

Name relevant youth fora (3-4 most important):

1.
2.
3.
4.

Describe their role in the national process:

25.6 reducing youth unemployment

Youth unemployment 1992:_____ 1996:_____

25.5 ensuring that by year 2000 more than 50% of youth -- gender balanced -- have access to appropriate secondary education or vocational training.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

A joint project between the Ministry for the Environment, Ministry of Youth Affairs, and UNICEF was initiated in May 1993, to develop a Youth response to Agenda 21. Thirty thousand copies of a brochure on UNCED were circulated to youth groups and secondary schools around the country. This brochure provided youth with an opportunity to identify areas of Agenda 21 that they considered to be important and to suggest ways in which their community and country can respond to these. A "Youth Response to Agenda 21" is being prepared using the feedback from these responses.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 26: RECOGNIZING AND STRENGTHENING THE ROLE OF INDIGENOUS PEOPLE AND THEIR COMMUNITIES.

26.3.a establishing a process to empower indigenous people and their communities -- through policies and legal instruments:

26.3.b strengthening arrangements for active participation in national policies

26.3.c involving indigenous people in resource management strategies and programmes at the national and local level.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Information explaining the significance of UNCED for Maori was prepared and distributed to iwi (tribal groups) during a series of interactive workshops on resource management issues held in the winter of 1993. It was intended that feedback from these workshops would be used to prepare a Maori response to Agenda 21.

Maori have been involved in the preparation of policy statements and plans, and relevant resource consent applications for development proposals. They are accorded a high level of consultation by local government, and Maori representative communities are attached to local government.

The Resource Management Act, the Conservation Act, the Environment Act and the Crown Minerals Act provide for explicit Maori involvement in a range of resource management functions. The Ture Whenua Maori Act 1993, emphasises retention of Maori land by the Maori owners.

Ch. 27: STRENGTHENING THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS: PARTNERS FOR SUSTAINABLE DEVELOPMENT.

27.5 developing mechanisms that allow NGOs to play their partnership role responsibly and effectively.
27.6 reviewing formal procedures and mechanisms to involve NGOs in decision making and implementation.
27.8 promoting and allowing NGOs to participate in the conception, establishment and evaluation of official mechanisms to review Agenda 21 implementation.

27.7 establishing a mutually productive dialogue by 1995 at the national level between NGOs and governments.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): There are NGO UNCED Coordinating Committees in Auckland, Wellington, and Christchurch. Other national environment and development NGOs (including umbrella organisations such as ECO and ANGOA) also have active interests in Agenda 21 related issues. However, there is no single national coordinating mechanism for concerted action by NGOs or other major groups on Agenda 21 implementation.

On a local level, small community groups such as the Christchurch Otautahi Agenda 21 UNCED-Earth Summit Committee on the Indigenous Ecosystems of Otautahi are involved in promoting the decisions of the Earth Summit, and in particular the biodiversity decisions.

A list of environmental groups in New Zealand can be found in the *Environmental Directory* published by the Ministry for the Environment.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 28: LOCAL AUTHORITIES' INITIATIVES IN SUPPORT OF AGENDA 21.

28.2.d encouraging local authorities to implement and monitor programmes that aim to ensure participation of women and youth in local decision making.
There are at least ------ local agenda 21s. -----% involve representation of women and/or youth
They involve ----% of population
Government support of local agenda 21 initiatives:

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Most local authorities in preparing the various strategic planning documents required by the Resource Management Act (and Local Government Act) are giving effect to matters set out in Agenda 21. There is space for territorial authorities to go beyond this if they wish, and an increasing number of local authorities are preparing programmes that can be considered local Agenda 21s. Three local authorities have joined the International Council for Local Environmental Initiatives (ICLEI).

Local authorities are obliged to consult with local communities in preparing District Plans which play a key role in resource utilisation decisions. Local authorities play a critical role in coastal management through information and awareness raising campaigns at the regional and local level. Local authorities also participate in the "Health Cities-Health Communities" programme of WHO.

Ch. 29: STRENGTHENING THE ROLE OF WORKERS AND THEIR TRADE UNIONS.
29.2 full participation of workers in implementation and evaluation of A21.
29.3 a to e (By year 2000, (a) promoting ratification of ILO conventions; (b) establishing bipartite and tripartite mechanism on safety, health and sustainable development; (c) increasing number of environmental collective agreements; (d) reducing occupational accidents and injuries; (e) increasing workers' education and training efforts.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

30: STRENGTHENING THE ROLE OF BUSINESS AND INDUSTRY.

30.6 There are governmental policies increasing the efficiency of resource use, including reuse, recycling, and reduction of waste per unit of economic output.

30.18.a encouraging the concept of stewardship in management and use of natural resources by entrepreneurs.

List any actions taken in this area: A "Business and Environment Conference" was held in August 1993 for business leaders to promote concepts of "eco-efficiency". The conference offered business leaders the opportunity to share success stories about incorporating environmental considerations into business management, and to learn how their competitors and colleagues are responding to the challenges of sustainable development. This conference was part of an on-going initiative to encourage businesses to regard environmental values as critical success factors in their marketing strategies.

30.18.b increasing number of enterprises that subscribe to and implement sustainable development policies.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page): Timber importers and building supply retailers have been involved in transforming the country's trade to sustainable sources of imported tropical timbers through the Imported Tropical Timber Group (ITTG). Industry has also assumed a critical role in the handling of chemical and hazardous wastes. The Chemical Industry Council created a Responsible Care programme for the management of hazardous wastes and chemicals. The oil industry has also been involved with the production of a guide to the installation of underground storage tanks.

STATUS REPORT ON PARTICIPATION BY MAJOR GROUPS AT THE NATIONAL AND LOCAL LEVELS

Ch. 31: SCIENTIFIC AND TECHNOLOGICAL COMMUNITY.

31.3.b Efforts are being made to improve exchange of knowledge and concerns between S&T community and the general public. Crown Research Institutes and Universities now have active strategies for communication with the general public, including producing publications aimed specifically at increasing public awareness. Across all government agencies there is an increasing interest in participatory processes involving the public.

31.9 developing, improving and promoting international acceptance of codes of practice and guidelines related to science and technology and its role in reconciling environment and development.

Brief comments on this chapter not already described in chapter 35 (maximum 100 words) (please, do not exceed this page): The decentralized science system in New Zealand places emphasis on individual science agencies developing their own bilateral and multilateral programmes and linkages. The Government assists such linkages with small seed funding through several programmes of the International Science Linkages Fund, a science promotion fund.

The implementation of sustainable development projects at the national level involves, in most cases, consultation between the Government and the relevant experts in the science community.

The Public Good Science Fund (PGSF) requires there to be a technology transfer component within all research bids it funds, including those relevant to sustainable development. CRI's are required by legislation to transfer knowledge and technology, and therefore must have explicit communication programmes about their science and research. The Royal Society of New Zealand has an active programme of science communication, and the promotion of science ethics and codes of scientific practice, as well as committees in a range of areas related to sustainable development.

Major Group organisations in the scientific and technological community also participate in the design of national sustainable development projects and policies. Examples include the maintenance of clean water supplies, the National Science Strategy for Sustainable Land Management, and the national environmental indicators project.

Ch. 32: STRENGTHENING THE ROLE OF FARMERS.

32.5.c promoting and encouraging sustainable farming practices and technologies.

32.5.e developing a policy framework that provides incentives and motivation among farmers for sustainable and efficient farming practices.

32.5.f enhancing participation of organizations of farmers in design and implementation of sustainable development policies.

Brief comments on this chapter (maximum 100 words) (please, do not exceed this page):

The central government agency responsible for strengthening the role of farmers through sustainable agriculture and rural development programmes is the Ministry of Agriculture (MAF).

There are numerous farmer and rural community groups that range from specific sheep breed societies to large industry producer boards. Local rural opportunity groups were formed to take on a diversity of functions and types of activities. Landcare groups have operated in New Zealand for many years in order to bring groups in a community together to tackle a common problem such as animal pests, erosion, or any other problem that may affect a rural community. In New Zealand there are 90 Landcare groups.

Federated Farmers of New Zealand (Inc) is the main sector organisation representing New Zealand farmers. A network of 24 provincial organisations and over 400 local branches provide a locally based, democratic organisation that gives farmers a collective voice, both within their region and nationally.

The New Zealand Federation of Young Farmers Clubs (YFC) is New Zealand's largest youth organisation. The current membership is approximately 3,000 people dispersed throughout 200 clubs in New Zealand. Membership is open to anyone between 15 and 30 years of age.

Women's Division Federated Farmers has 410 branches throughout New Zealand which provide opportunities for fellowship, education, community service and action according to local needs. It aims to strengthen rural communities and promote the welfare of rural families.

AGENDA 21 CHAPTER 33: FINANCIAL RESOURCES AND MECHANISMS

Financial resources and mechanisms are also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national financial policies, domestic and external (including ODA)

NATIONAL PRIORITY:

STATUS REPORT: Through the Official Development Assistance (NZODA) programme, New Zealand contributes to the promotion of sustainable development in developing countries. Many New Zealand development assistance projects have helped to address environmental problems and provide strategies for sustainable development. These include agro-forestry, soil conservation, land-use planning, water resources management, fisheries research and management, aquaculture, geothermal and hydro-electricity planning, environmental education and management training, and forestry conservation.

The New Zealand Government recognises the urgent need for international cooperation to achieve sustainable social and economic development. At UNCED, New Zealand agreed to commit new and additional resources for sustainable development projects of global environmental benefit and has since taken a decision to contribute financially to the Global Environmental Facility (GEF), including an amount of NZ$10.4 million to the 1994-96 replenishment. About half of this is supplementary to the assessed share.

At UNCED, New Zealand joined other developed countries in reaffirming its commitment to reach the accepted UN target of 0.7 % of GNP for ODA. It noted, however, that the availability of additional ODA resources would have to be considered by the Government in the context of domestic economic circumstances. In 1995/96, the total ODA allocation of New Zealand was approximately 0.23% of the country's GNP. The major part of this (over 80%) is an allocation of NZ$164.670 million for the bilateral and multilateral programmes, administered by the Ministry of Foreign Affairs and Trade.

The small island states of the South Pacific are the major focus of New Zealand's ODA program. Some 47% of the total ODA figure, that is about NZ$77 million, goes towards bilateral and multilateral programs in the South Pacific.

The main part of this allocation consists of NZ$64.9 million for bilateral country programs in the Pacific. This assistance goes mainly to the Polynesian and Melanesian countries with which New Zealand has traditional links, mainly as members of the Commonwealth. Some NZ$2.3 million goes towards regional programs which includes sectoral programmes in education, health, women-in-development, agriculture, good governance, economic development and trade, as well as programs in private sector development. In addition, NZODA contributes some NZ$9.5 million to the work of regional agencies in the South Pacific. The regional agencies receiving NZODA support include: The Forum Secretariat, the South Pacific Commission, the South Pacific Regional Environment Program, the Forum Fisheries Agency, the South Pacific Applied Geoscience Commission, the University of the South Pacific, and the South Pacific Board for Educational Assessment.

In the past, the Government has played a significant role in providing relief to farmers affected by climatic disasters such as drought. It is now recognised that disaster relief programmes can contribute to environmental degradation by distorting risk perceptions of land users and thereby encouraging unsustainable use of land and other resources. Where support is provided, it is in a manner that does not reduce individual responsibility for managing risk.

CHANGES IN NATIONAL BUDGET TO ADDRESS SUSTAINABLE DEVELOPMENT:

NEW ECONOMIC INSTRUMENTS:

ELIMINATION OF ENVIRONMENTALLY UNFRIENDLY SUBSIDIES:

ODA policy issues

STATISTICAL DATA/INDICATORS					
	1992	1993	1994	1995	1996
ODA funding provided or received (Total US$million)					
	Average for 92-93		Average for 94-96		
Net flow of external capital from all sources as % of GDP					
Other data					

AGENDA 21 CHAPTER 34: TRANSFER OF ENVIRONMENTALLY SOUND TECHNOLOGY, COOPERATION AND CAPACITY-BUILDING

Transfer of environmentally sound technology, cooperation and capacity-building is also covered under each sectoral chapter of Agenda 21 where relevant. This summary highlights broader national policies and actions relating to chapter 34.

NATIONAL PRIORITY:

STATUS REPORT ON LINKS BETWEEN NATIONAL, REGIONAL AND INTERNATIONAL INFORMATION NETWORKS/SYSTEMS: Although there are no central databases on environmentally sound technologies, nor any Government initiatives targeted specifically at environmentally sound technologies, information on environmentally sound technologies is held by a wide variety of independent and quasi-government agencies. Some examples include the Building Research Association of New Zealand (BRANZ) for building-related technologies; Telarc, for environmentally-friendly products; and Tradenz for commercial ventures. Some sector-based government departments and regional councils are active in promoting and distributing information on specific aspects of environmentally sound technology, such as energy conservation and efficiency.

With regard to energy efficiency, the Energy Efficiency and Conservation Authority (EECA) is the main information source. The EECA holds information about energy efficient technologies to support government activities and provides information and support services of high quality and easy accessibility to clients. The needs of clients, are continuously being reviewed and updated to ensure that the information systems are relevant.

Various agricultural industry organisations such as the Meat Research and Development Council (MRDC) and the New Zealand Dairy Board provide information on environmentally sound technologies at the national level. The MRDC runs monitor farms which test technologies and management methods. The results of these practical trials are then published widely so farmers can use the information in running their farm.

The New Zealand economy has undergone significant reform during the past decade to make it more robust and responsive to both domestic and international demands including the demand for environmentally sound technology. To achieve this, *inter alia*, a floating exchanging rate was introduced, assistance to industry declined with the removal of subsidies and the decline in tariffs, and the market has been substantially deregulated. This has lead to an open trading economy and a reliance on market mechanisms, making it accessible to importers and, with the improving economic performance, more attractive to investors.

New Zealand has a sophisticated library and communications system which allows ready access to most publicly available sources of information on environmentally sound technology, both in New Zealand and overseas.

The Ministry of Agriculture (MAF), under its Sustainable Agriculture Facilitation program, commissions research and distributes information on environmentally sound technology through a publication series. An example of this is a recent report on *Treatment of Dairy Shed Effluent* which examines each disposal method and the outcomes of using each method. The Ministry of Agriculture has also commissioned research into identifying farm level constraints and designing strategies to facilitate adoption of new sustainable technologies and farm management practices that are environmentally and economically sustainable. Although there have been similar studies done in the past, this study will concentrate on farmers identifying the constraints to technology uptake and both farmers and researchers providing solutions.

There is no centralised process for evaluating the range of technologies being developed overseas. Such evaluation is done on an *ad hoc* basis, and further work would be required to assess any gaps and deficiencies in the quality and accessibility of information on environmentally sound technologies.

MEANS OF IMPLEMENTATION: There is no overall government mechanism for identifying and promoting environmentally sound technologies. Government policy has avoided intervention in terms of evaluation and promotion of particular technologies. It has been decided that the market provides the most effective mechanism for achieving this, because individual firms are in the best position to assess their needs and to influence market outcomes. Government policy has been against the establishment of cumbersome and bureaucratic mechanisms such as might be required to attempt centralised efforts to identify and promote environmentally sound technologies. The Government believes that historical deficiencies have arisen when institutions have been supply (rather than demand) driven. When government has intervened, it has been on specific issues, such as energy efficiency, and has involved promoting objectives rather than specific technologies.

• Describe any work being undertaken at the national or local level regarding efforts to promote clean production processes and/or the concepts of eco-efficiency. These processes may include training, preferential financial arrangements, information dissemination and changes in legal or regulatory frameworks.

The Ministry for the Environment is investigating options for information on, and encouragement towards, cleaner production techniques. The Ministry, working with industry, regional and local authorities, and other sector groups, has also established a number of cleaner production demonstration projects throughout the country.

• Provide information on the adoption of environmental management systems. National reaction to environmental management system standards such as the ISO 14000 Series and others. Please note efforts made at the national level to promote their adoption and the creation of certification infrastructure in order to facilitate access to these standards to local industry.

• List and describe programs or work under way to facilitate the transfer of ESTs to small and medium sized enterprises. Please note efforts to facilitate access to financial resources and other transfer strategies.

AGENDA 21 CHAPTER 35: SCIENCE FOR SUSTAINABLE DEVELOPMENT

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL SCIENTIFIC KNOWLEDGE, RESEARCH NEEDS AND PRIORITIES:

No direct attempt has been made to assess New Zealand's national scientific knowledge in the area of sustainable development.

Several Government documents, strategic statements and National Science Strategies have identified research needs and priorities in numerous areas contributing to sustainable development. These include *Path to 2010* (1992); *The Next Three Years, Towards 2010* (1994); the *Environment 2010 Strategy*, *Science for Sustainable Land Management - Towards a New Agenda; Public Investment in Science and Technology - a Review of Directions through to the year 2001*; and *Research, Science, and Technology: 2010*.

National Science Strategies (NSS) are currently in place to coordinate and advise on research priorities for sustainable land management and climate change, and the appropriateness of a NSS for biodiversity is also being investigated. Several aspects of sustainable development are included within the priorities of the PGSF, the government fund for strategic research, but there is no overarching mechanism for prioritising national research for sustainable development. The PGSF's cross-output themes give priority to research related to sustainable development in the following areas - development of a body of knowledge on society and on addressing social issues; development of a body of knowledge on the natural and modified environment and on addressing environmental issues; global climate change (information and implications); and sustainable land management.

There is significant science effort in New Zealand to understand the physical aspects of sustainable land management (SLM). This area receives 81% of current funding for SLM research, with 4% dedicated to cultural and social aspects and 15% to understanding economic and financial objectives. Although it is recognised that the impact of human behaviour poses the biggest threat to SLM, there is currently little social science input to the management of the land.

The key national priorities for sustainable land management research, as identified in *Science for Sustainable Land Management - Towards a New Agenda*, are water quality; biodiversity; soil quality; weeds, pests, and diseases; climate and atmosphere; physical hazards; and chemical residues and hazardous substances. Theme areas where further research is needed include: - monitoring and indicators appropriate for New Zealand; social science contribution to environmental understanding, integration of human and physical sciences; limits, reversibility, resilience and best land management practices; risk assessment in land management decision making; Maori sustainable land management science needs; predictive models and decision support systems for outcomes of various land uses, including ground proofing; environmental technologies that support and enhance sustainable land management; and environmental accounting at a national regional and enterprise level.

STEPS TAKEN TO ENHANCE SCIENTIFIC UNDERSTANDING, IMPROVE LONG TERM SCIENTIFIC ASSESSMENT, BUILDING OF CAPACITY AND CAPABILITY:

The Government has taken a strategic approach to promoting the long-term contribution of RS&T to its social, economic, and environmental objectives, many aspects of which relate to sustainable development. This approach is described in *Research Science & Technology: 2010*, which sets three high level goals namely: fostering societal values and attitudes that recognise science and technology as critical to future prosperity; ensuring an adequate level of investment in science as a component in national life which has a cultural value in its own right; and maximising the direct contribution of science and technology to diverse social, economic and environmental goals.

At a lower level, the Government is able to enhance scientific understanding and improve long-term scientific assessment, capacity, and capability in specific areas through its priority-setting process for the PGSF, which funds about 50% of all government- funded research in New Zealand. This process involves dividing the allocated funding between 17 socio-economic outputs areas. The most recent priority-setting exercise resulted in significant funding increases for outputs relating to primary production industries, energy research, society and culture, natural resources, land and freshwater ecosystems and marine environments, climate and atmosphere, (outputs 1-6, 11, 13-16). Within each of the remaining outputs, there is provision for research concerned with the sustainable utilisation/development of resources of the industry in question.

Specific steps taken to enhance scientific understanding which may, directly or indirectly, underpin sustainable development include:- NSSs (a mechanism for coordinating research and advising on priorities). A NSS has recently been established for sustainable land management; Marsden Fund which aims to broaden and deepen the research skill base by supporting excellent science; Technology for Business Growth scheme, to promote technology uptake for business growth by encouraging private investment in RS&T; Technology Uptake and Innovation programme - to encourage technology uptake and innovation through exposure to experts in S&T and the promotion of technological capabilities acquisition.

STATISTICAL DATA/INDICATORS			
		Year	
Number of scientists, engineers and technicians engaged in research and experimental development (full time equivalents, including public and private sector, but excluding PhD and Masters Students and support staff)	7,686	1990/91	
Total expenditure for research and experimental development (US$eq.)	$	19--	

Other data

New Zealand does not collect R&D statistics specifically related to sustainable development. However, the latest R&D statistics, for 1993/94, provide the following break-down of expenditure by key area of activity.

In 1993/94 the total R&D undertaken in New Zealand was NZ$824.8 million, up just over 9% from NZ$754.5 in 1992/93.

The real growth rate of New Zealand's total expenditure on R&D since 1989 has now risen to the same level as that of reference countries (Sweden, Norway, Finland, Denmark, Austria, and Ireland), and exceeds the rate of growth in the OECD.

Through the RS&T: 2010 strategy statement, the Government has committed itself to increasing expenditure from the current 0.57% of GDP to 0.8% by 2010. As part of achieving this goal, the Government is increasing funding for the PGSF from NZ$256 million to NZ$330 million over the next 5 years.

The estimated funding of R&D by the business sector has increased substantially from NZ$245.4 million to NZ$293 million in 1993/94, or from 0.29% of GDP to 0.35% of GDP.

AGENDA 21 CHAPTER 36: PROMOTING EDUCATION, PUBLIC AWARENESS AND TRAINING

NATIONAL PRIORITY:

STATUS REPORT: The Ministry of Education (MOE) is primarily responsible for developing national guidelines on all aspects of education, including national curriculum development objectives. Several other agencies, including the Ministry for the Environment, the Department of Conservation, and the Ministry of Agriculture are also involved to some extent in giving specialist advice. MOE is not currently a standing member of the UNCED Implementation Officials Group, but it uses consultative and contractual approaches to obtain advice on environmental education. Stakeholders consulted include the teaching community, women, youth, indigenous people, and the scientific and technical community.

a) Reorientation of education towards sustainable development

New Zealand is in the process of developing an environmental education strategy to establish an integrated national approach to environmental education across all sectors of the community. It will be linked to the government's long-term environmental and educational strategies. The strategy is being developed through a two-year process of consultation with relevant sectors and interested people in the community. A discussion document was published in late 1996 and submissions have been requested.

A guideline to assist teachers in integrating environmental education into curriculum subjects has been developed by the Ministry of Education. The guideline is scheduled for publication in 1996.

A joint NGO and central/local government initiative, the Greenbox, has been in place for some years and delivers environmental information and resource materials to all schools twice a year.

The Ministry of Agriculture has a Sustainable Agriculture Program which aims to raise the awareness of the farming community of sustainable agriculture and related issues. MAF also produces school education kits on sustainable agriculture which seek to educate young people about New Zealand's agriculture and to survey changes in land management and planning.

b) Increasing public awareness

Local networks of teachers, NGOs, and central and local government officials are being developed in a number of regions. The primary purpose of these networks, which serve as branches of the New Zealand Association for Environmental Education, is information exchange, especially about local environmental issues and resources.

c) Promoting training

ROLE OF MAJOR GROUPS: The primary role of the Ministry of Women's Affairs is provision of gender-specific advice to the Government on public policy issues. It has identified a number of key areas for women's progress toward equality. These include work on a greater sharing and valuing of unpaid work and increased employment opportunities; and work in education and training, effective compulsory education for Maori, and effective post-compulsory training, including business skills and industry training.

Many local authorities are developing policies and strategies for environmental education, which include business and community education as well as activities with schools.

FINANCING AND COST EVALUATION OF THE LABOUR ACTIVITIES:

STATISTICAL DATA/INDICATORS				
	1980	1990	Latest 1992	
Adult literacy rate (%) Male				
Adult literacy rate (%) Female				
% of primary school children reaching grade 5 (1986-93)		94		
Mean number of years of schooling				
% of GNP spent on education	5.8	6.4	7.2	
Females per 100 males in secondary school	96.1	100	96.1	
Women per 100 men in the labour force				
Other data				

AGENDA 21 CHAPTER 37: NATIONAL MECHANISMS AND INTERNATIONAL COOPERATION FOR CAPACITY-BUILDING IN DEVELOPING COUNTRIES

National capacity building is also covered under sectoral chapters.
Donors: You may wish to describe here how Agenda 21 has influenced your ODA policies in this area.
Developing countries: You may wish to describe any new national mechanisms for capacity building - and any changes in technical cooperation.

NATIONAL PRIORITY:

STATUS REPORT ON NATIONAL ENDOGENOUS CAPACITY BUILDING: The 25th South Pacific Forum held in Brisbane, Australia from July 31 to August 1994 expressed concern about the destructive harvesting of forests in its region and the world. The Prime Ministers of Australia, Fiji, New Zealand, Papua New Guinea, Solomon Islands and Vanuatu agreed during the Forum to work towards a common code of conduct on logging of indigenous forests to which companies operating in their respective countries will adhere. The code also expressed the need to increase monitoring of logging and exports of timber. Significant progress has been made towards establishing the regional code of conduct through two meetings of government officials and technical foresters.

New Zealand's bilateral assistance on forestry is provided in accordance with New Zealand's capacity and in response to specific requests from partner governments on the basis of their national and regional plans and priorities. Bilateral assistance is directed primarily to the Pacific with major projects in several countries. New Zealand participates in projects by contributing technical assistance, cash grants, material supplies, and training. Currently, New Zealand is associated with overseas development assistance in seven Pacific Island Developing Countries.

New Zealand plays an active role in a number of regional organisations in the South Pacific and provides financial and technical support for these organisations. As most of the Pacific Island countries are small, these regional organisations play an important part in sustainable development activities. Some of the regional programs that New Zealand is involved in include : the South Pacific Form Secretariat which promotes regional cooperation, especially in trade and economics matters, services the Forum meeting of Heads of Forum countries, and has an important policy coordination role; the South Pacific Commission promotes economic and social cooperation and development in the region; the Forum Fisheries Agency provides assistance to member countries in the economic and sustainable management of their fisheries, particularly tuna; the University of the South Pacific which endeavours to meet the educational and tertiary learning needs of the 12 member countries in the region; and the South Pacific Regional Environment Program which promotes sustainable development in the South Pacific.

AGENDA 21 CHAPTER 38: INTERNATIONAL INSTITUTIONAL ARRANGEMENTS

Ch. 38: Brief summary of any particular UN System response affecting this country/state:	

AGENDA 21 CHAPTER 39: INTERNATIONAL LEGAL INSTRUMENTS AND MECHANISMS

Ch. 39: International Legal Instruments are covered under the relevant sectoral chapters. This is a listing of major agreements/conventions (not already covered) entered into and relevant to Agenda 21:

In signing and ratifying international agreements, the Government of New Zealand uses established mechanisms and consultative processes that consider the relationships and overlaps between agreements.

Where new policy is being developed and proposed, all significant proposals require the approval of the Cabinet, usually via the relevant Cabinet Committee. Proposals are required to clearly state the issue under consideration, set out options for change, and evaluate these, reporting on the impact on the public good. Consultation is undertaken in the development of the proposals. Papers are required to be circulated to departments whose interests may be affected so that Ministers are well informed of any impacts on *inter alia* the economy and the environment.

The sponsoring department must attach a signed certificate to each proposal confirming that consultation has occurred and that other departments' views are reflected in the proposal.

In addition to this process, where significant reform is being considered, interdepartmental working groups are often established to ensure integrated consideration. Through this process, relationships and overlaps between issues and international agreements are covered and integration and consistency with government is maintained.

AGENDA 21 CHAPTER 40: INFORMATION FOR DECISION-MAKING

This chapter is also covered under sectoral and other chapters of this profile. The matrix below gives an overview of how national authorities rate the available information for decision making.

Rating of available data and information suitable for decision-making

Agenda 21 Chapters		Very good	Good	Some good data but many gaps	Poor	Remarks
2.	International cooperation and trade		✓			
3.	Combating poverty		✓			
4.	Changing consumption patterns			✓		
5.	Demographic dynamics and sustainability		✓			
6.	Human health			✓		
7.	Human settlements			✓		
8.	Integrating E & D in decision-making			✓		
9.	Protection of the atmosphere			✓		
10.	Integrated planning and management of land resources			✓		
11.	Combating deforestation			✓		
12.	Combating desertification and drought			✓		
13.	Sustainable mountain development			✓		
14.	Sustainable agriculture and rural development			✓		
15.	Conservation of biological diversity			✓		
16.	Biotechnology		✓			
17.	Oceans, seas, coastal areas and their living resources			✓		
18.	Freshwater resources			✓		
19.	Toxic chemicals			✓		
20.	Hazardous wastes			✓		
21.	Solid wastes				✓	
22.	Radioactive wastes			✓		
24.	Women in sustainable development			✓		
25.	Children and youth			✓		
26.	Indigenous people			✓		
27.	Non-governmental organizations			✓		
28.	Local authorities			✓		
29.	Workers and trade unions			✓		
30.	Business and industry			✓		
31.	Scientific and technological community			✓		
32.	Farmers			✓		
33.	Financial resources and mechanisms			✓		
34.	Technology, cooperation and capacity-building			✓		
35.	Science for sustainable development			✓		
36.	Education, public awareness and training			✓		
37.	International cooperation for capacity-building		✓			
38.	International institutional arrangements		✓			
39.	International legal instruments		✓			

Additional Comments

According to the Government of New Zealand, information plays a critical role in ensuring that objectives of sustainable development policies are met in areas such as health, welfare, housing, and environment. Monitoring and evaluation of information provides a firm basis for decision making, the efficient use of resources, clarifying the social and environmental impacts of policies, and providing a means of measuring progress towards agreed objectives. The Government believes that the coordination of information related to environment and development in the government sector would allow better use of existing information networks both within and outside government.

Major initiatives in this area include: publication of a report on the state of public health in New Zealand, "Our Health, Our Future" by the Public Health Commission in December 1993; Statistics New Zealand published a report called "Measuring Up" which presents information of New Zealand's atmosphere and climate and other environmental areas; publication of the first State of the Environment Report for New Zealand (due in 1997);the development of a set of National Environmental Indicators; publication of "Community Help" which provides information to rural and urban people on services provided by government departments, state owned enterprises, and non-government agencies; expansion of the "Rural Bulletin" which provides information on government policies and programmes and on rural development initiatives to over 1,500 rural networks; publication of a Community Development Resource Kit by the Department of Internal Affairs which provides information on legal structures and entities needed for sustainable community development activities; and the development of Link Centres which provide information on government activities.

While there is a programme to develop a set of national environmental indicators, the Government has not had a specific program to develop or use indicators of sustainable development at the national, regional, or local level. Departments of the UNCED Implementation Officials Group, and others, have considered the option of developing checklists for incorporating sustainability principles into organisational practices and policy making.

The Ministry for the Environment is currently coordinating the development of a core set of environmental indicators, and a framework for gathering, analysing, and releasing such information. The indicators will show environmental trends and the effectiveness of actions taken to avoid, or solve, environmental problems. The indicators will supply information for regular State of the Environment Reports. They will show the government whether it is meeting its environmental objectives set out in *Environment 2010 Strategy*, and they will show New Zealand's progress towards sustainable management of the environment.

The Ministry of Agriculture has commissioned several research programs for the development of indicators of sustainability of agriculture. MAF has also held seminars with farmers and other government agencies to determine additional indicators. MAF is also currently involved in the OECD development of agri-environmental indicators.

Central and local government agencies are developing their own sets of indicators for their own purpose, to assist planning and resource allocation, service provision or other actions.

MOT is developing an information strategy for transport. The Strategy concentrates on environmental, commercial, safety and social sustainability.

STATISTICAL DATA/INDICATORS

	1989	1993	Latest 199-	
Number of telephones in use per 100 inhabitants	43.4	46.0		
Other data				